ROADSTAR 11AK30

MODEL

SERVICE MANUAL

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB/ AV-28BS88EN

SPECIFICATIONS

Item	Content			
	AV-28BT8ENS AV-28BT8ENB AV-28BT80EN	AV-28BT8EPS AV-28BT8EPB AV-28BT80EP	AV-28BT8EES AV-28BT8EEB	AV-28BS88EN
Dimensions (W × H × D)	77 x 58 x 48 cm			
Mass	33.2 kg			
TV RF System	B/G	B/G , L/L'	D/K , K1	B/G
Colour System **TV Mode**	PAL	PAL / SECAM	PAL / SECAM	PAL
Video Mode	PAL / SECAM / NTSC 3.58 / NTSC 4.43 (EP/EE MODELS) PAL / NTSC 3.58 / NTSC 4.43 (EN MODELS)			
Sound System	German + NICAM			
Teletext System	Fastext / Toptext			
Receiving Frequency				
VHF(VL)	46.25MHz ～ 168.25MHz			
(VH)	175.25MHz ～ 463.25MHz			
UHF	471.25MHz ～ 863.25MHz			
CATV	S01-S41 & S75-S79			
Intermediate Frequency				
VIF Carrier	38.9MHz (B/G , D/K , L) / 33.9MHz(L')			
SIF Carrier	33.4MHz (5.5MHz:B/G) / 32.9MHz (6.0MHz:D/K) / 32.4MHz (6.5MHz:L) / 40.4MHz (6.5MHz:L')			
Colour Sub Carrier Freq.				
PAL	4.43MHz			
SECAM	4.43MHz			
NTSC	3.58MHz / 4.43MHz			
Power Input	AC 220V～240V , 50Hz			
Power Consumption	114W (Max) 4W (Standby)	114W (MAX) 4W (Standby)	114W (MAX) 4W (Standby)	135W (Max) 4W (Standby)
Aerial Input Term	75 Ω unbalanced, Coaxial			
Picture Tube Size	Visible size : 66cm, Measured diagonally			
High Voltage	30.3kV	30.3kV	30.3kV	29.6kV
Speaker	5.7cm × 16cm Oval type × 2			
Audio Output	10W × 2			
Input **Video**	1Vp-p, 75 Ω			
S/Video	Y : 1Vp-p Positive C : 0.286Vp-p			
Audio(L/R)	500mVrms, High Impedance			
Output **Video**	1Vp-p 75Ω			
Audio(L/R)	500mVrms, Low Impedance			
Input Terminal **Rear Side**	AV1 (Video/Audio/RGB) AV2 (Video/Audio/S-VHS)			
Front Side	AV3 (Video/Audio)			
Output Terminal **Front Side**	Headphone jack (Stereo mini jack 3.5 ϕ)			
Rear Side	AV1 (Video/Audio) AV2 (Video/Audio) (Selected TV,AV1 or AV3)			
Remote Control Unit	VE-30017763 (RM-C1100), (AA/R06 dry battery × 2)			

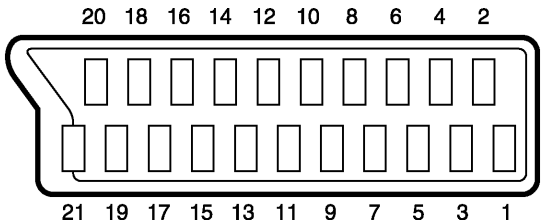
Design & specifications are subject to change without notice.

■21-pin Euro connector (SCART socket) : AV-1 / AV-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	AV-1	AV-2
1	AUDIO R output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
2	AUDIO R input	500mVrms(Nominal),High impedance	○	○
3	AUDIO L output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
4	AUDIO GND		○	○
5	GND (B)		○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○
7	B input	$700mV_{B-W}$, 75Ω	○	NC
8	FUNCTON SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	NC
9	GND (G)		○	○
10	-		NC	-
11	G input	$700mV_{B-W}$, 75Ω	○	NC
12	-		NC	-
13	GND (R)		○	○
14	GND (YS)		○	NC
15	R / C input	R : $700mV_{B-W}$, 75Ω C : $300mV_{P-P}$, 75Ω	○ (R/C)	○ (only C)
16	Ys input	Low : 0 – 0.4, High : 1 - 3V, 75 Ω	○	NC
17	GND(VIDEO output)		○	○
18	GND(VIDEO input)		○	○
19	VIDEO output	$1V_{S-W}$ (Negative going sync), 75Ω	○ (TV)	○ (TV/LINE OUT)
20	VIDEO / Y input	$1V_{S-W}$ (Negative going sync), 75Ω	○	○
21	COMMON GND		○	○

[Pin assignment]



SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND, the ISOLATED(NEUTRAL) side GND and EARTH side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

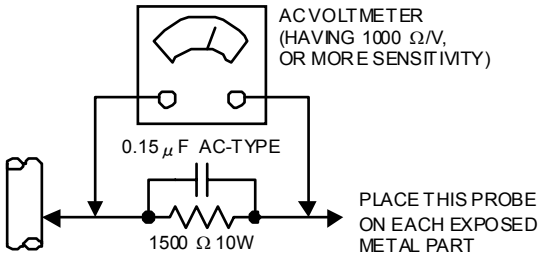
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

- 100 programmers from VHF, UHF bands or cable channels can be preset.
- It has two Euroconnector sockets for external devices (such as video recorder, video games, audio set, etc.)
- Stereo sound systems (Nicam + German) are available.
- APS (Automatic Programming System)

MAIN DIFFERENCE LIST

⚠	Model Name / Part Name	AV-28BT8ENS AV-28BT8ENB AV-28BT80EN	AV-28BT8EPS AV-28BT8EPB AV-28BT80EP	AV-28BT8EES AV-28BT8EEB	AV-28BS88EN
	MAIN PWB	VE-20101577	VE-20101576	VE-20101622	VE-20101578
⚠	INSTRUCTION BOOK	VE-50028493	VE-50028296	VE-50028326	VE-50028511
⚠	FRONT CABINET	VE-20082289(ENS) VE-20081489(ENB) VE-20082289(EN)	VE-20082289(EPS) VE-20081489(EPB) VE-20082289(EP)	VE-20082289(EES) VE-20081489(EEB)	VE-20082289
⚠	REAR COVER	VE-20084616(ENS) VE-20069018(ENB) VE-20084616(EN)	VE-20084616(EPS) VE-20069018(EPB) VE-20084616(EP)	VE-20084616(EES) VE-20069018(EEB)	VE-20086416
⚠	LENS	VE-20069218 (ENS/ENB) VE-20096162(EN)	VE-20069218 (EPS/EPB) VE-20096162(EP)	VE-20069218	VE-20096162
⚠	RATING LABEL	VE-20102137(ENS) VE-20102147(ENB) VE-20102144(EN)	VE-20101937(EPS) VE-20101939(EPB) VE-20101934(EP)	VE-20101919(EES) VE-20101915(EEB)	VE-20102141
	CARTON BOX	VE-50028496(ENS) VE-50028502(ENB) VE-50028500(EN)	VE-50028423(EPS) VE-50028424(EPB) VE-50028221(EP)	VE-50028218(EES) VE-50028216(EEB)	VE-50028498

CABINET COLOUR

Model Name	FRONT CABINET & REAR COVER	LENS
AV-28BT8ENS AV-28BT8EPS AV-28BT8EES	SILVER	BLACK
AV-28BT8ENB AV-28BT8EPB AV-28BT8EEB	BLACK	BLACK
AV-28BT80EN AV-28BT80EP AV-28BS88EP	SILVER	SILVER

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 8 screws marked **A** as shown in the Fig. 1.
3. Remove the 4 screws marked **B** around the AV TERMINAL BOARD.
4. Withdraw the rear cover toward you.

REMOVING THE AV TERMINAL BOARD

- Removing the rear cover.

1. Remove the 2 screws marked **C** fastened the AV TERMINAL BOARD.
2. Remove the AV TERMINAL BOARD.

REMOVING THE MAIN PWB

- Removing the rear cover.
- Removing the AV TERMINAL BOARD.

1. Remove the 3 screws marked **D** as shown in the Fig.1.
2. Slightly raise the both sides of the chassis by hand and withdraw the MAIN PWB backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- Removing the rear cover.

1. Remove the 4 screws marked **E**, and remove speaker as shown in Fig. 1.
2. Remove the speaker.

REMOVING THE FRONT AV & HEADPHONE PWB

- Removing the rear cover.
- Removing the MAIN PWB.

1. Remove the 2 screws marked **F**.
2. Remove the FRONT AV & HEADPHONE PWB.

REMOVING THE FRONT CONTROL PWB

- After removing the rear cover.

1. Remove the MAIN PWB ASS'Y.
2. Remove the **5** screws marked **G**, and remove the FRONT CONTROL PWB.

CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the PW Board. (Refer to REMOVING THE MAIN PWB).
2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

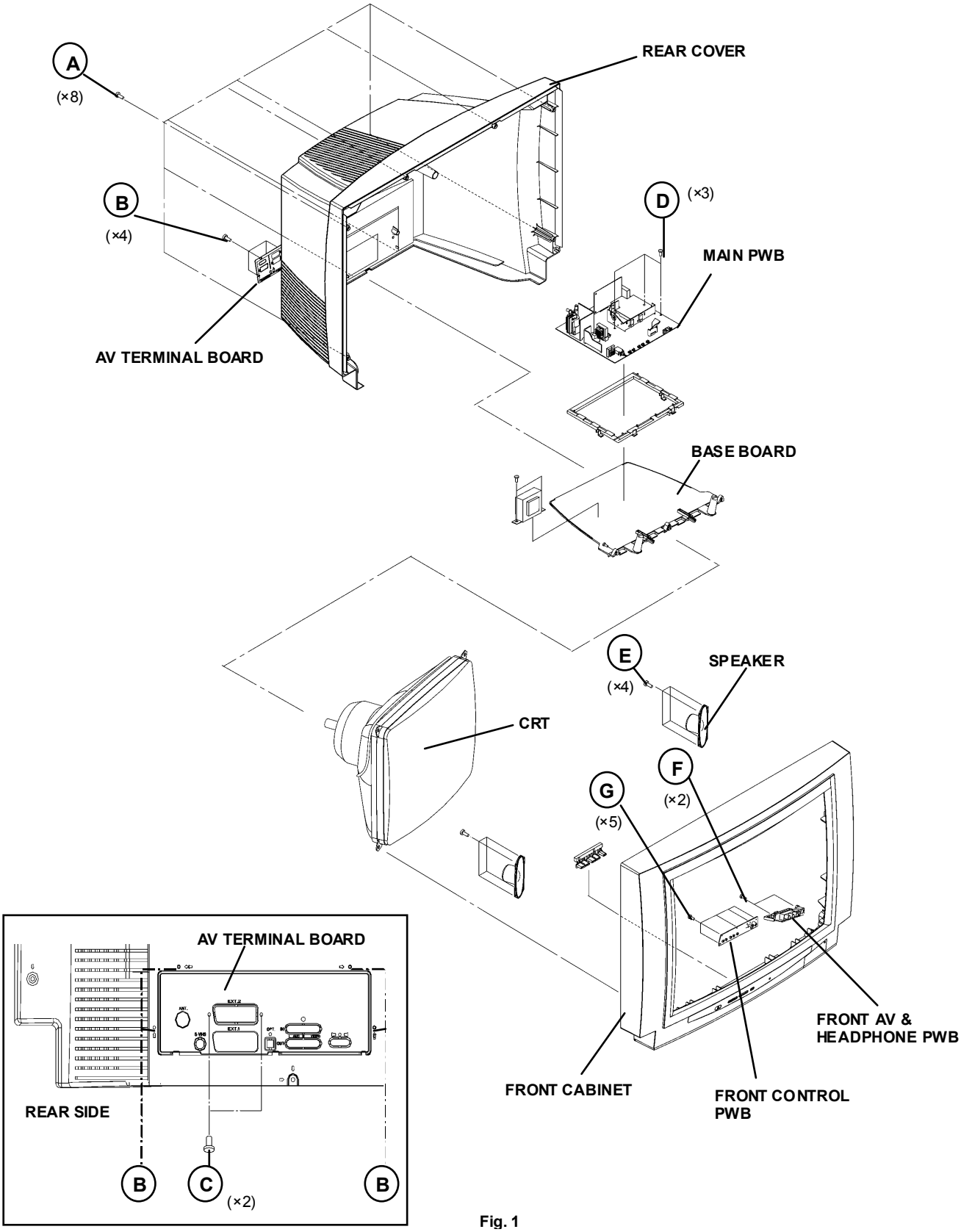

A
(×8)
REAR COVER
B
(×4)
D
(×3)
MAIN PWB
AV TERMINAL BOARD
BASE BOARD
E
(×4)
SPEAKER
CRT
F
(×2)
G
(×5)
FRONT AV &
HEADPHONE PWB
FRONT CABINET
FRONT CONTROL
PWB
AV TERMINAL BOARD
REAR SIDE
B
C
(×2)
B

Fig. 1

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

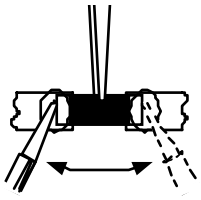
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

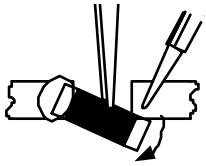
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

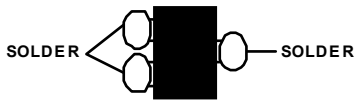


(2) Shift with tweezers and remove the chip part.

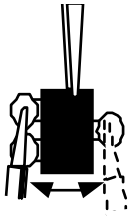


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

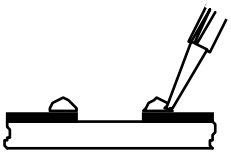


Note : After removing the part, remove remaining solder from the pattern.

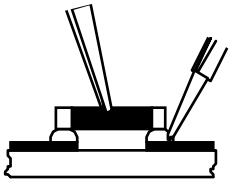
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.

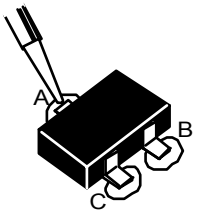


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

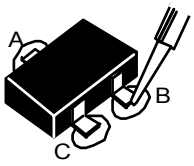


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



MEMORY IC REPLACEMENT

1. Memory IC

This model use a memory IC.
This memory IC stores data for proper operation of the video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

(1) Power off

Switch off the power and disconnect the power cord from the wall outlet.

(2) Replace the memory IC

Initial value must be entered into the new IC.

(3) Power on

Connect the power cord to the wall outlet and switch on the power.

(4) SERVICE MENU setting

1) Press MENU key and, while the displayed MENU screen, press **4, 7, 2, 5** key on the remote control unit or press MUTING key and INFORMATION key at the simultaneously.
2) The SERVICE MENU screen of Fig.1 is displayed.
3) Verify what to set in the SERVICE MENU, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.
4) Press the STANDARD key to exit SERVICE MENU.

(5) Receive channel setting

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

(6) User settings

Check the user setting items according to after page.
Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

SERVICE MENU

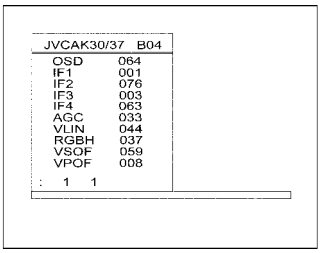


Fig.1

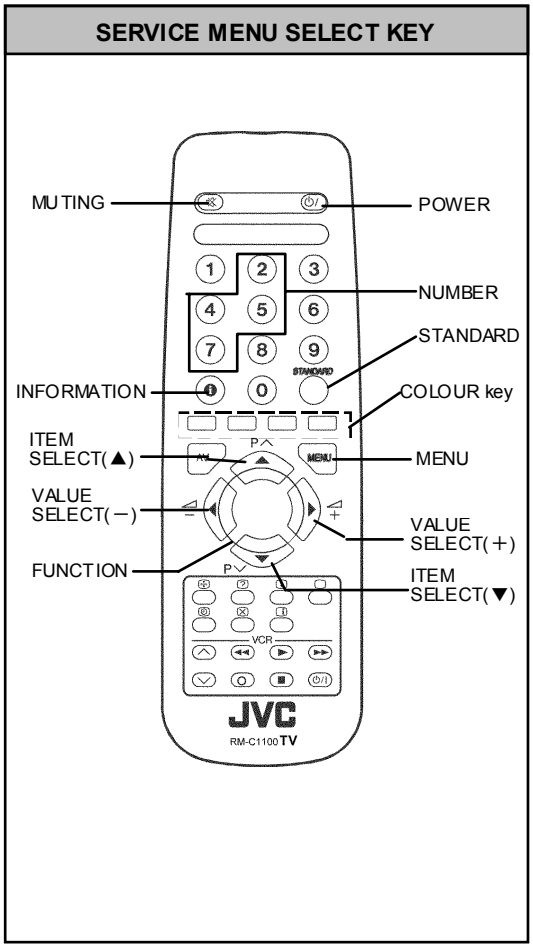


Fig.2

SETTING OF THE LAST MEMORY FOR SHIPMENT

■ USER SETTING VALUES

Setting Item	Setting Value	Setting Item	Setting Value
SOUND MENU		FEATURE MENU	
BALANCE	CENTER	SLEEP TIMER	OFF
BASS	↑	CHILD LOCK	OFF
TREBLE	↑	LANGUAGE	ENGLISH
MODE	STEREO	AV-2 OUTPUT	TV
EFFECT	OFF		
3D PANORAMA (only AV-28BS88EN)	OFF		
PICTURE MENU		INSTALL	
BRIGHTNESS	These adjust are automatically restored when APS bit in Service menu is set. The procedure for setting APS bit is described bellow.	PROGRAMME	Refer to the INSTRUCTION BOOK.
CONTRAST		BAND	
COLOUR		CHANNEL	
SHARPNESS		SEARCH	
HUE (only NTSC)		FINE TUNING	
PICTURE MODE	AUTO	STORE	

■ SETTING APS BIT IN SERVICE MENU

1) Enter service menu in TV mode by pressing “INFORMATION” and “MUTING” keys simultaneously. Service Menu will appear.
2) Select TX1 (TELETEXT OPTION) by pressing Up/Down keys on remote control unit.
3) Press the 7 key on remote control unit to set APS bit. (After this, bit 7 of TX1 will be “1”)
4) Press STANDARD key on remote control unit to exit service mode.
   NOTE : DO NOT TURN OFF THE TV BY USING POWER BUTTON ON THE FRONT PANEL.

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION

1. **You can make the necessary adjustments for this unit with either the Remote Control Unit or With the adjustment tools and parts as given below.**
2. **Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that AC power is turned on correctly.
4. Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

BRIGHTNESS CONTRAST COLOUR	CENTER
SHARPNESS	

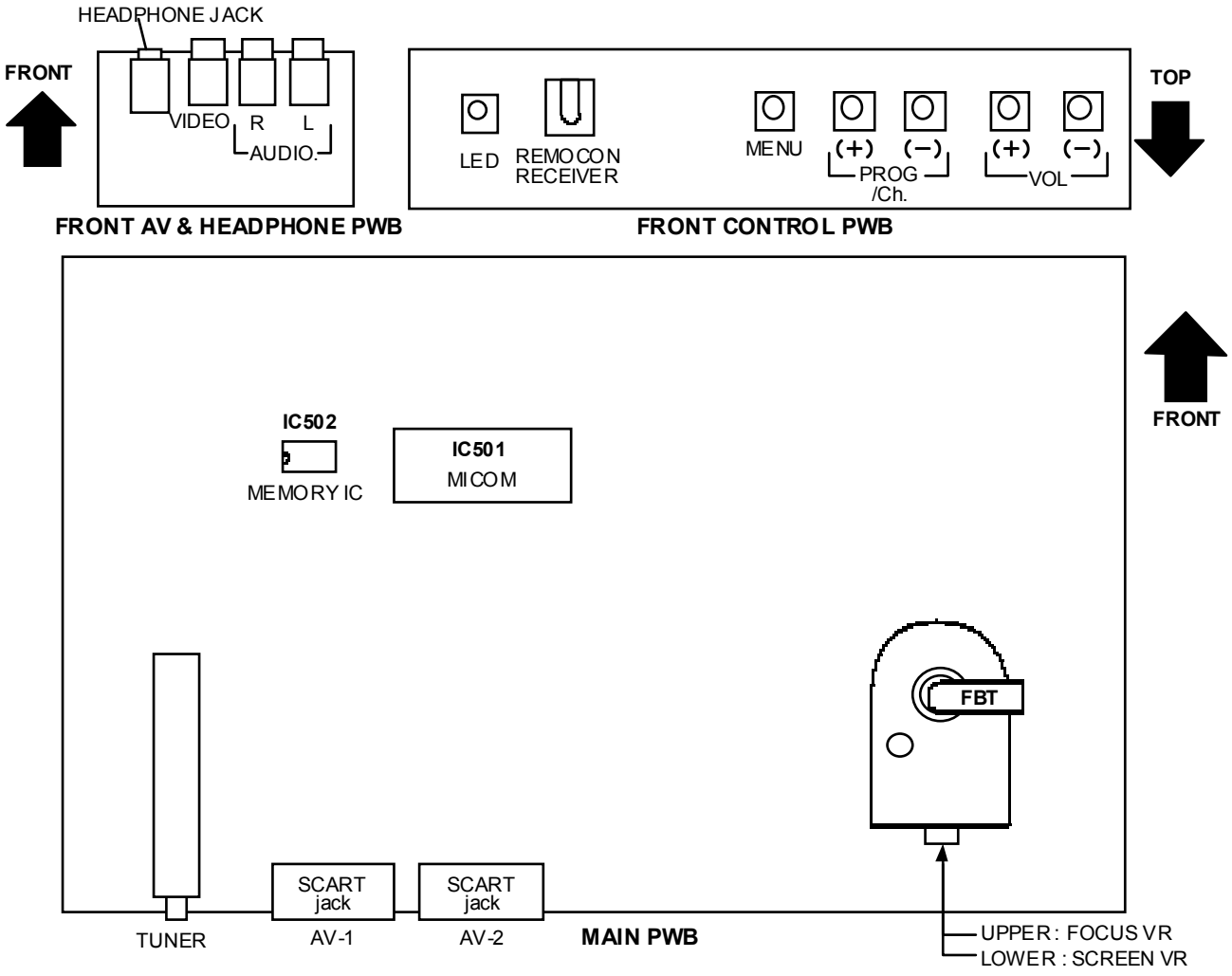
ADJUSTMENT EQUIPMENT

1. DC voltmeter (or digital voltmeter)
2. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
3. Remote control unit

ADJUSTMENT ITEM

- SCREEN ADJUSTMENT
- OSD HORIZONTAL POSITION ADJUSTMENT
- IF ADJUSTMENT
- AGC AUTOMATICALLY ADJUSTMENT
- DEFLECTION CIRCUIT ADJUSTMENT
- GEOMETRY MENU ADJUSTMENT
- WHITE BALANCE ADJUSTMENT

MAIN PARTS LOCATIONS



BASIC OPERATION SERVICE MENU

■ HOW TO ENTER THE SERVICE MENU

1) Press the **MENU** key.
2) MENU screen of fig.1 will be displayed

MENU SCREEN

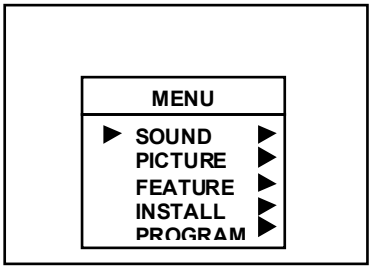


Fig.1

3) While the MENU screen is displayed , press the 4,7,2,5 key or INFORMATION key and MUTING key simultaneously.
4) The SERVICE MENU screen of (Fig.2) will be displayed.

SERVICE MENU

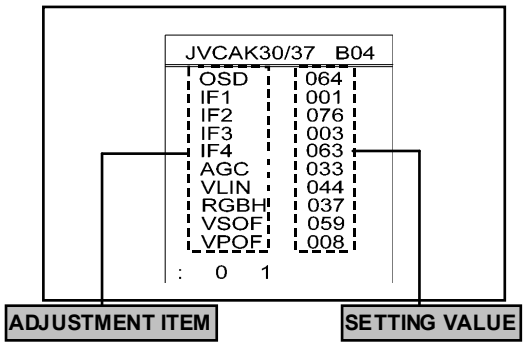


Fig.2

■ SELECTION OF ADJUSTMENT ITEMS

1) Enter the SERVICE MENU
2) Press the FUNCTION ▲/▼ key and select the ADJUSTMENT ITEM.
3) Press the FUNCTION ◀/▶ key and set the SETTING VALUE.

■ HOW TO EXIT SERVICE MODE

1) Press the **STANDARD** Key on REMOTE CONTROL UNIT.

■ HOW TO ENTER THE GEOMETRY MENU

- This model is built-in GEOMETRY MENU for geometry adjustment.

1) Enter the SERVICE MENU
2) Press the GREEN key, geometry menu appears (Fig. 3).
3) Press the FUNCTION ▲/▼ key and select the ADJUSTMENT ITEM.
4) Press the FUNCTION ◀/▶ key and set the SETTING VALUE.

GEOMETRY MENU

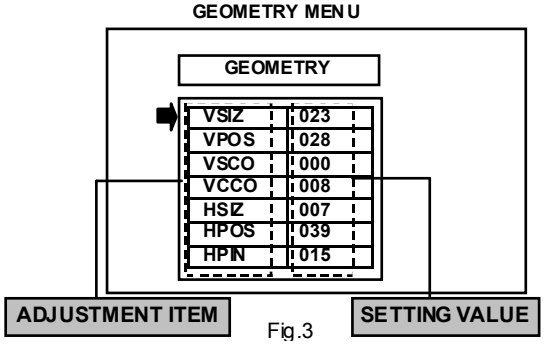
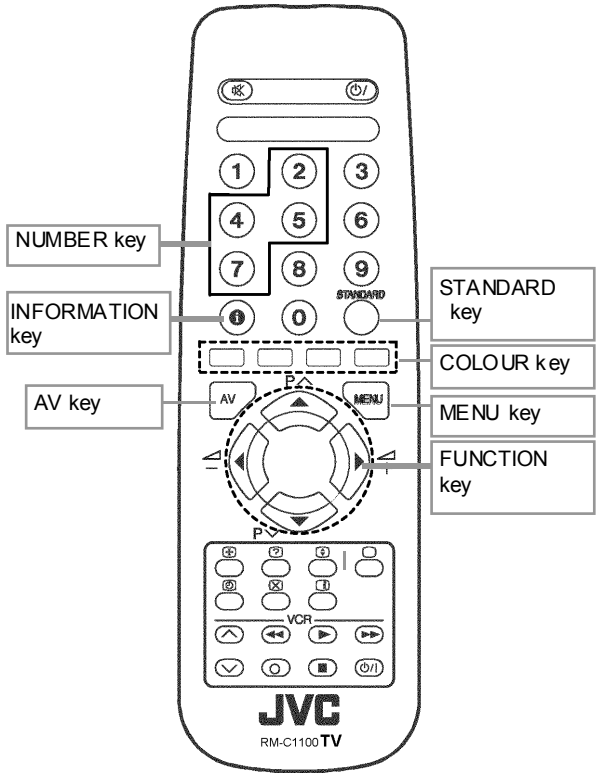


Fig.3

REMOTE CONTROL UNIT key NAME



- **FUNCTION OF COLOUR key**

RED key :
It switches the AVL to ON or OFF mode on service menu. AVL word is visible on service menu when AVL is on.

GREEN key :
It switches to GEOMETRY adjust menu. Geometry of the picture is adjusted in this menu.

YELLOW key :
It switches to VERTICAL SCAN DISABLE mode. It is useful to adjust screen voltage.

BLUE key :
It is used to adjust AGC and IF automatically on service menu.

■ ADJUSTMENT ITEM & INITIAL (Recommended) SETTING VALUE in the SERVICE MENU

1/2

ADJUSTMENT ITEM	DESCRIPTION	INITIAL VALUE	
OSD	HORIZONTAL POSITION OF OSD	065	
IF1	IF COARSE ADJUSTMENT	004	
IF2	IF FINE ADJUSTMENT	065	
IF3	IF COARSE ADJUSTMENT FOR L-PRIME	004	
IF4	IF FINE ADJUSTMENT FOR L-PRIME	065	
AGC	AUTOMATIC GAIN CONTROL	Automatically	
VLIN	VERTICAL LINEARITY	Not used	
RGBH	RGB MODE HORIZONTAL SHIFT OFFSET	007	
VSOF	VERTICAL SIZE OFFSET for 60Hz	-01	+05 (Only AV-28BS88)
VPOF	VERTICAL POSITION OFFSET for 60Hz	-01	
HSOF	HORIZONTAL SIZE OFFSET for 60Hz	+00	-02 (Only AV-28BS88)
HPOF	HORIZONTAL POSITION OFFSET for 60Hz	+00	-06 (Only AV-28BS88)
HTOF	HORIZONTAL TRAPEZOID OFFSET for 60Hz	+01	-03 (Only AV-28BS88)
WR	WHITE POINT ADJUSTMENT FOR RED	030	
WG	WHITE POINT ADJUSTMENT FOR GREEN	030	
WB	WHITE POINT ADJUSTMENT FOR BLUE	030	
BR	BIAS FOR RED	028	
BG	BIAS FOR GREEN	029	
APR	AUTOMATIC RGB PEAK REGULATION THRESHOLD	004	
BRI	BRIGHTNESS	032	
CON	CONTRAST	033	
COL	COLOUR	031	
SHR	SHARP	006	
HUE	HUE	031	
VOL	VOLUME	009	
WR-R	WHITE POINT ADJUSTMENT for RED (RGBmode)	022	
WG-R	WHITE POINT ADJUSTMENT for GREEN (RGBmode)	032	
WB-R	WHITE POINT ADJUSTMENT for BLUE (RGBmode)	022	
FMP1	FM PRESCALER WHEN AVL IS OFF	Not used	
NIP1	NICAM PRESCALER WHEN AVL IS OFF	Not used	
SCP1	SCART PRESCALER WHEN AVL IS OFF	Not used	
SEC1	SECAM PRESCALER WHEN AVL IS OFF	Not used	
FMP2	FM PRESCALER WHEN AVL IS ON	015	
NIP2	NICAM PRESCALER WHEN AVL IS ON	045	
SCP2	SCART PRESCALER WHEN AVL IS ON	017	
SEC2	SECAM PRESCALER WHEN AVL IS ON	Not used	
F1H	HIGH BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY	00001001	
F1L	LOW BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY	10010010	
F2H	HIGH BYTE OF VHF3-UHF CROSS-OVER FREQUENCY	00011011	
F2L	LOW BYTE OF VHF3-UHF CROSS-OVER FREQUENCY	10000010	
BS1	BAND SWITCHING BYTE FOR VHF1	00000011	
BS2	BAND SWITCHING BYTE FOR VHF3	00000110	
BS3	BAND SWITCHING BYTE FOR UHF	10000101	
CB	CONTROL BYTE	10001110	
OP1	PERIPHERAL OPTIONS	01110101	

ADJUSTMENT ITEM	DESCRIPTION	INITIAL VALUE
OP2	RECEPTION STANDARD OPTIONS	00001001 (EN) 01011001 (EP) 00011001 (EE)
OP3	VIDEO OPTIONS	01101100(EN) 11101100(EP/EE)
OP4	TV FEATURES	10001000
OP5	CHANNEL TABLES	0000000D
TX1	TELETEXT OPTIONS	11010101 (EN) 11000101 (EP) 11001101 (EE)
GEOM	GEOMETRY OPTIONS	00100000
OP8	PIP PRESET CHANGE	00000100

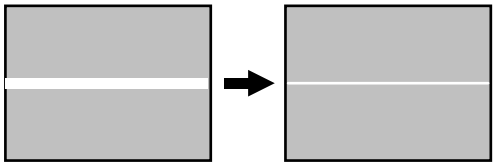
[GEOMETRY MENU]

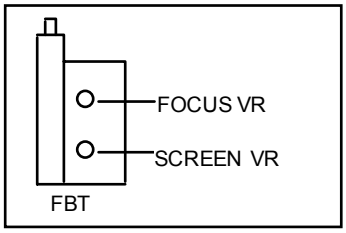
ADJUSTMENT ITEM	DESCRIPTION	INITIAL VALUE	
		4:3 MODE	16:9 MODE
VSIZ	VERTICAL SIZE for 50Hz	038	009
VPOS	VERTICAL POSITION for 50Hz	022	025
VSCO	VERTICAL S-CORRECTION for 50Hz	005	005
VCCO	VERTICAL CORNER CORRECTION for 50Hz	007	007
HSIZ	HORIZONTAL SIZE for 50Hz	009	013
HPOS	HORIZONTAL POSITION for 50Hz	030	030
HPIN	HORIZONTAL PINCUSHION for 50Hz	014	012
HCCO	HORIZONTAL CORNER CORRECTION for 50Hz	010	010
HTRP	HORIZONTAL TRAPEZOID for 50Hz	013	018
VZSZ	VERTICAL ZOOM SIZE for 50Hz	Not used	Not used

ADJUSTMENTS

■ SCREEN ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
SCREEN adjustment	**Remote control unit**		**SCREEN VR [On the FBT]**	1. Enter SERVICE MENU. 2. Press YELLOW key to disable vertical scan. 3. Adjust SCREEN VR. on the FBT as thin as possible. 4. Press YELLOW key again to enable vertical scan. 5. Press STANDARD key to leave service menu.

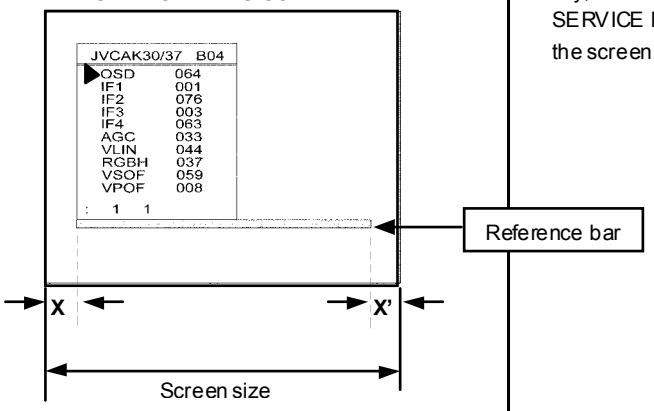




■ OSD HORIZONTAL POSITION ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL POSITION OF OSD adjustment	**Remote control unit**		**OSD**	1. Enter SERVICE MENU. 2. Select OSD with FUNCTION (▲/▼) key 3. Adjust the OSD horizontal position with the FUNCTION (◄/►) key, which shifts the reference bar on the bottom of the SERVICE MENU horizontally, so that the OSD is positioned on the screen center. (**X=X'**)

SERVICE MENU SCREEN



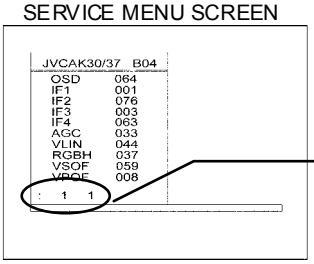
■ IF ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
IF adjustment	**Remote control unit**		**IF 1** **IF 2** **IF 3** **IF 4**	1. Receive a PAL colour bar pattern. 2. Enter SERVICE MENU. 3. Select IF 1 with FUNCTION (▲/▼) key 4. Press BLUE key during IF 1 is highlighted, IF 1 and IF 2 values are adjusted automatically by software. 5. If the standard is L-prime, IF 3 and IF 4 values are adjustment automatically when BLUE key is pressed during IF 1 is highlighted.

■ AGC AUTOMATICALLY ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
AGC AUTOMATIC-ALLY adjustment & check	**Remote control unit**		**AGC**	1. Enter SERVICE MENU. 2. Receive a 60dB μV RF signal level. 3. Select AGC with the FUNCTION (▲/▼) key. 4. Press BLUE key on the remote control unit. 5. Then the adjustment will be done automatically by software. 6. See the AGC indicator on SERVICE MENU, it must be "1". 7. Check that picture is normal at 90dB μV signal level.

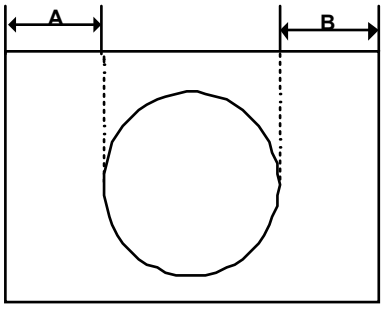
SERVICE MENU SCREEN



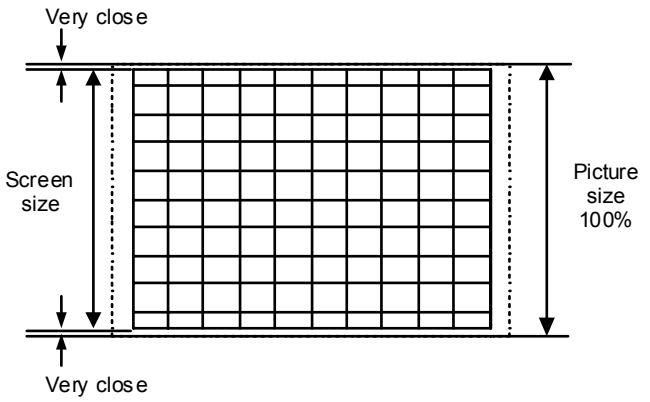
:	1	1
IF INDICATOR	**AGC INDICATOR**	**NONE**

■ DEFLECTION CIRCUIT ADJUSTMENT

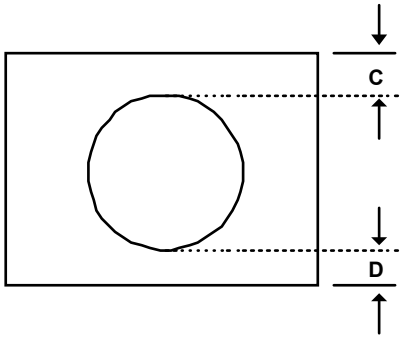
Item	Measuring instrument	Test point	Adjustment part	Description
RGB MODE HORIZONTAL SHIFT OFFSET adjustment	**Signal generator** **Remote control unit**		**RGBH**	1. Input R/G/B circle pattern signal via video input terminal. 2. Press AV key on the remote control unit, force the TV to RGB mode. 3. Enter SERVICE MENU. 4. Select RGBH with the FUNCTION (▲/▼) key. 5. Adjust RGBH with the FUNCTION (◄/►) key until the circle pattern is horizontally centered.(**A=B**) 6. Check and readjust RGBH item if the adjustment becomes improper after some other geometric adjustments are done.

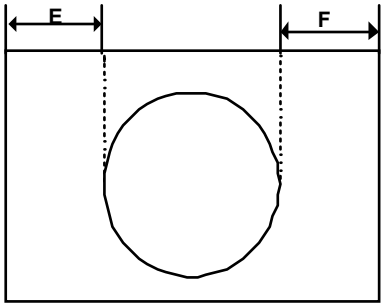


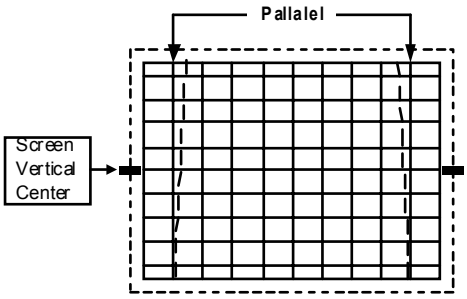
VERTICAL SIZE OFFSET adjustment (60Hz)	**Signal generator** **Remote control unit**		**VSOF**	1. Receive a NTSC-M cross-hatch pattern of vertical frequency 60Hz. 2. Enter SERVICE MENU. 3. Select VSOF with the FUNCTION (▲/▼) key. 4. Adjust VSOF with the FUNCTION (◄/►) key until the horizontal black lines on both the upper and lower part of the pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear. 5. Check and readjust VSOF item if the adjustment becomes improper after some other geometric adjustments are done.



Item	Measuring instruments	Test point	Adjustment part	Description
VERTICAL POSITION OFFSET adjustment (60Hz)	**Signal generator** **Remote control unit**		**VPOF**	1. Receive a NTSC-M circle pattern of vertical frequency 60Hz. 2. Enter SERVICE MENU. 3. Select VPOF with the FUNCTION (▲/▼) key. 4. Adjust VPOF with the FUNCTION (◀/▶) key until the picturer is vertically centered.(**C=D**) 5. Check and readjust vertical position item if the adjustment becomes improper after some other geometric adjustments are done.
HORIZONTAL POSITION OFFSET adjustment (60Hz)	**Signal Generator** **Remote control unit**		**HPOF**	1. Receive a NTSC-M circle pattern signal of vertical frequency 60Hz. 2. Enter SERVICE MENU. 3. Select HPOF with the FUNCTION (▲/▼) key. 4. Adjust HPOF with the FUNCTION (◀/▶) key until the circle pattern is horizontally centered.(**E=F**) 5. Check and readjust a horizontal position item if the adjustment becomes improper after some other geometric adjustments are done.
HORIZONTAL TRAPEZOID OFFSET adjustment (60Hz)	**Signal Generator** **Remote control unit**		**HTOF**	1. Receive a NTSC-M cross-hatch pattern signal of vertical frequency 60Hz. 2. Enter SERVICE MENU. 3. Select HTOF with the FUNCTION (▲/▼) key. 4. Adjust HTOF with the FUNCTION (◀/▶) key until both lengths of the upper side and lower side of the closs-hatch pattern become equal. 5. Check and readjust HTOF position item if the adjustment becomes improper after some other geometric adjustments are done.

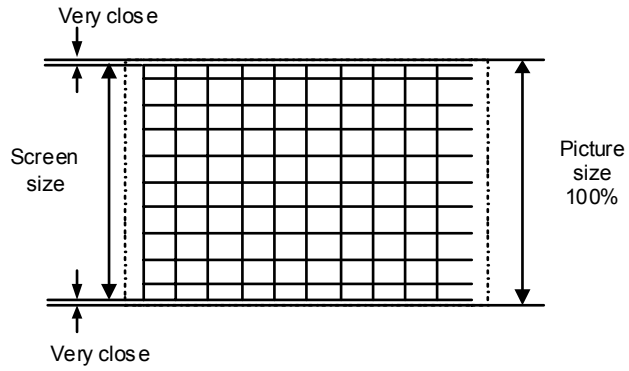


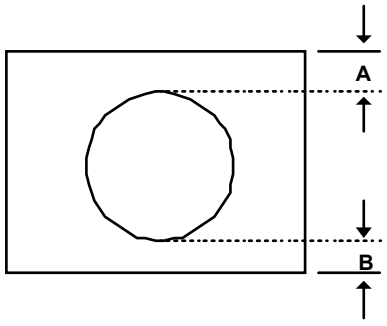




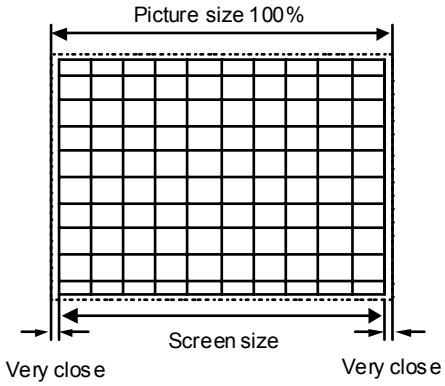
■ GEOMETRY MENU ADJUSTMENT (Adjust 4:3MODE / 16:9MODE respectively)

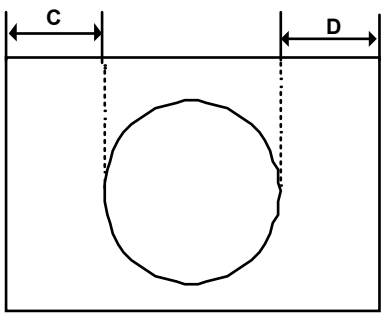
Item	Measuring instruments	Test point	Adjustment part	Description
VERTICAL SIZE adjustment (50Hz)	**Signal generator** **Remote control unit**		**VSIZ**	1. Receive a PAL B/G cross-hatch pattern of vertical frequency 50Hz. 2. Enter SERVICE MENU. 3. Press the GREEN then enter the GEOMETRY MENU. 4. Select VSIZ (Vertical size) with the FUNCTION (▲/▼) key. 5. Adjust VSIZ with the FUNCTION (◀/▶) key until the horizontal black lines on both the upper and lower part of the pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear. 6. Check and readjust VSIZ item if the adjustment becomes improper after some other geometric adjustments are done.
VERTICAL POSITION adjustment (50Hz)	**Signal generator** **Remote control unit**		**VPOS**	1. Receive a PAL B/G circle pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select VPOS (Vertical position) with the FUNCTION (▲/▼) key. 4. Adjust VPOS with the FUNCTION (◀/▶) key until the circle pattern is vertically centered.(**A=B**) 5. Check and readjust VPOS item if the adjustment becomes improper after some other geometric adjustments are done.
VERTICAL S-CORREC-TION adjustment (50Hz)	**Signal generator** **Remote control unit**		**VSCO**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select VSCO (Vertical s-correction) with the FUNCTION (▲/▼) key. 4. Adjust VSCO with the FUNCTION (◀/▶) key until the vertical length of the center squarer of the cross-hatch pattern becomes equal to upper and lower part squares of the cross-hatch pattern. 5. Check and readjust VSCO item if the adjustment becomes improper after some other geometric adjustments are done.



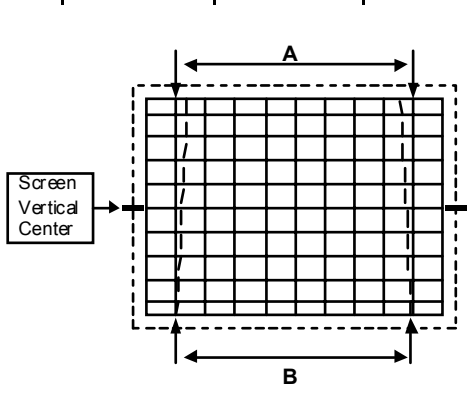


Item	Measuring instrument	Test point	Adjustment part	Description
VERTICAL CORNER CORRECTION adjustment (50Hz)	**Signal generator** **Remote control unit**		**VCCO**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select VCCO (Vertical s-correction) with the FUNCTION (▲/▼) key. 4. Adjust VCCO with the FUNCTION (◀/▶) key until the vertical length of the upper and lower part squares of the cross-hatch pattern become equal to each other. 5. Check and readjust VCCO item if the adjustment becomes improper after some other geometric adjustments are done.
HORIZONTAL SIZE adjustment (50Hz)	**Signal generator** **Remote control unit**		**HSIZ**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select HSIZ (Horizontal size) with the FUNCTION (▲/▼) key. 4. Adjust HSIZ with the FUNCTION (◀/▶) key until the vertical black lines on both the left and right part of the cross-hatch pattern become very close to the left and right horizontal sides of picture tube and nearly about to disappear.
HORIZONTAL POSITION adjustment (50Hz)	**Signal generator** **Remote control unit**		**HPOS**	1. Receive a PAL B/G circle pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select HPOS with the FUNCTION (▲/▼) key. 4. Adjust HPOS with the FUNCTION (◀/▶) key until the circle pattern is horizontally centered.(**C=D**) 5. Check and readjust HPOS item if the adjustment becomes improper after some other geometric adjustments are done.





Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL PINCUSHION adjustment (50Hz)	**Signal generator** **Remote control unit**		**HPIN**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select HPIN (Horizontal pincushion) with the FUNCTION (▲/▼) key. 4. Adjust HPIN with the FUNCTION (◀/▶) key until the bending of the vertical line of the cross-hatch pattern are corrected. 5. Check and readjust HPIN item if the adjustment becomes improper after some other geometric adjustments are done.
HORIZONTAL CORNER CORRECTION adjustment (50Hz)	**Signal generator** **Remote control unit**		**HCCO**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select HCCO (Horizontal corner correction) with the FUNCTION (▲/▼) key. 4. Adjust HCCO with the FUNCTION (◀/▶) key until the bending of the vertical line of the cross-hatch pattern are corrected. 5. Check and readjust HCCO item if the adjustment becomes improper after some other geometric adjustments are done.
HORIZONTAL TRAPEZOID adjustment (50Hz)	**Signal generator** **Remote control unit**		**HTRP**	1. Receive a PAL B/G cross-hatch pattern signal of vertical frequency 50Hz. 2. Enter GEOMETRY MENU. 3. Select HTRP (Horizontal trapezoid) with the FUNCTION (▲/▼) key. 4. Adjust HTRP with the FUNCTION (◀/▶) key until both lengths of the upper side and lower side of the cross-hatch pattern become equal.(**A=B**) 5. Check and readjust HTRP item if the adjustment becomes improper after some other geometric adjustments are done.



■ WHITE BALANCE ADJUSTMENT

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>WHITE BALANCE adjustment (Low light)</td><td>Signal generator

Remote control unit</td><td></td><td>WR
WG
WB</td><td>1. Receive a black & white signal (colour off).
2. Enter SERVICE MENU.
3. Select WR / WG / WB with the (▲/▼) key, respectively.
4. Adjust WR / WG / WB with the FUNCTION (◄/►) key, respectively, until the white part turns to pure white without any other color..</td></tr>
<tr><td colspan="5"><table><tr><th>Item</th><th>WR</th><th>WG</th><th>WB</th></tr><tr><td>Recommended value</td><td>030</td><td>030</td><td>030</td></tr></table></td></tr>
<tr><td>WHITE BALANCE adjustment (High light)</td><td>Signal generator

Remote control unit</td><td></td><td>BR
BG</td><td>1. Receive a black & white signal (colour off)
2. Enter SERVICE MENU.
3. Select BR / BG with the FUNCTION (▲/▼) key respectively.
4. Adjust BR / BG with the FUNCTION (◄/►) key respectively until the white part of screen make white colour.</td></tr>
<tr><td colspan="5"><table><tr><th>Item</th><th>BR</th><th>BG</th></tr><tr><td>Recommended value</td><td>028</td><td>029</td></tr></table></td></tr>
</table>

MEMO

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- FRONT CONTROL PW BOARD ASS'Y ····· 30
- FRONT AV & HEADPHONE PW BOARD ASS'Y ····· 30

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[AV-28BS8EN]

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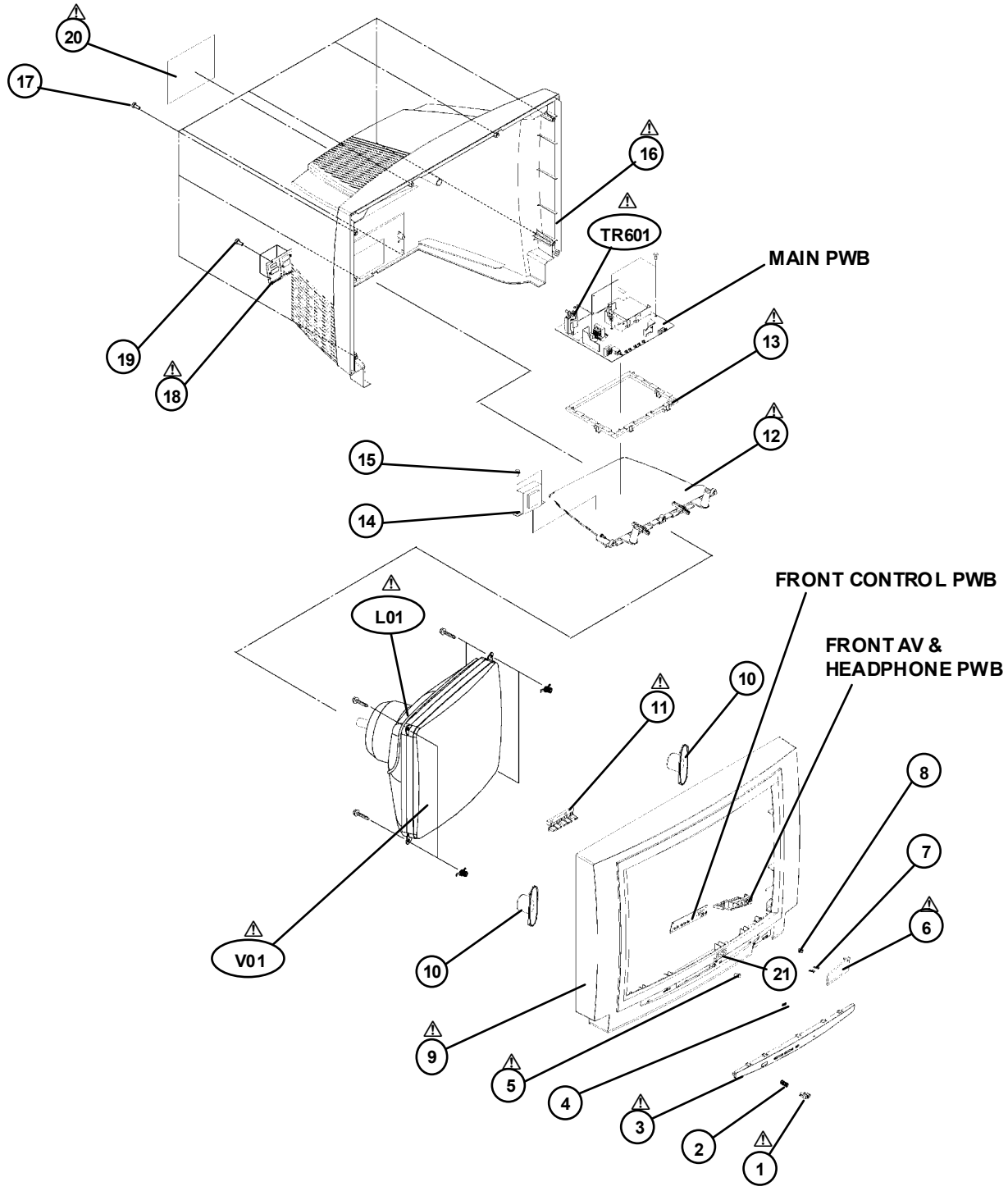
USING PW BOARD & REMOTE CONTROL UNIT

Model / PWB ASS'Y	AV-28BT8ENS AV-28BT8ENB AV-28BT80EN	AV-28BT8EPS AV-28BT8EPB AV-28BT80EP	AV-28BT8EES AV-28BT8EEB	AV-28BS88EN
MAIN PWB	VE-20101577	VE-20101576	VE-20101622	VE-20101578
CRT SOCKET PWB	VE-20094670	←	←	←
FRONT CONTROL PWB	VE-20082481	←	←	←
FRONT AV & HEADPHONE PWB	VE-20083646	←	←	←
REMOTE CONTROL UNIT	VE-30017763 (RM-C1100)	←	←	←

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	VE-30002751	PICTURE TUBE	(ITC)
⚠	L01	VE-30002138	DEG COIL	
⚠	TR601	VE-30017522	FBT	Within MAIN PWB
⚠	1	VE-20083491	BUTTON ON/OFF	(SILVER MODEL)
⚠	1	VE-20069016	BUTTON ON/OFF	(BLACK MODEL)
	2	VE-35004544	SPRING	
⚠	3	VE-20069218	LENS (except AV-28BT80EN,AV-28BT80EP,AV-28BS88EN)	
⚠	3	VE-20096162	LENS SILVER (AV-28BT80EN,AV-28BT80EP,AV-28BS88EN)	
⚠	4	VE-20078776	LENS LED	
⚠	5	VE-20004339	LENS PRE-AMP	
⚠	6	VE-20101840	FRONT AV DOOR	(SILVER MODEL)
⚠	6	VE-20101841	FRONT AV DOOR	(BLACK MODEL)
	7	VE-20003605	PIN (FRONT AV DOOR)	(X2)
	8	VE-40000026	EJECTOR	
⚠	9	VE-20082289	FRONT CABINET	(SILVER MODEL)
⚠	9	VE-20081489	FRONT CABINET	(BLACK MODEL)
	10	VE-30001946	SPEAKER 8R 15W	(X2)
⚠	11	VE-20083502	BUTTON FUNCTION	(SILVER MODEL)
⚠	11	VE-20069014	BUTTON FUNCTION	(BLACK MODEL)
⚠	12	VE-20081578	BASE	
	13	VE-20094516	SHASSIS FRAME	
	14	VE-30015614	PFC TRF	
	15	VE-35000217	SCREW (3.5X9.5)	(X2)
⚠	16	VE-20084616	BACK COVER	(SILVER MODEL)
⚠	16	VE-20069018	BACK COVER	(BLACK MODEL)
	17	VE-35004572	SCREW (4X20)	(X8)
⚠	18	VE-20067720	AV TERMINAL BOARD	
	19	VE-35000211	SCREW (2.9X9.5)	(X4)
⚠	20	VE-20102137	RATING LABEL	(AV-28BT8ENS)
⚠	20	VE-20102147	RATING LABEL	(AV-28BT8ENB)
⚠	20	VE-20101937	RATING LABEL	(AV-28BT8EPS)
⚠	20	VE-20101939	RATING LABEL	(AV-28BT8EPB)
⚠	20	VE-20101919	RATING LABEL	(AV-28BT8EES)
⚠	20	VE-20101920	RATING LABEL	(AV-28BT8EES POLAND)
⚠	20	VE-20101915	RATING LABEL	(AV-28BT8EEB)
⚠	20	VE-20101913	RATING LABEL	(AV-28BT8EEB POLAND)
⚠	20	VE-20102144	RATING LABEL	(AV-28BT80EN)
⚠	20	VE-20101934	RATING LABEL	(AV-28BT80EP)
⚠	20	VE-20102141	RATING LABEL	(AV-28BS88EN)
	21	VE-40009154	LOGO JVC	(SILVER MODEL)
	21	VE-40009152	LOGO JVC	(BLACK MODEL)

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

[AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN]

MAIN P.W. BOARD ASS'Y (VE-20101577)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R102	VE-30012657	SMD RES.	1/16W 1K J
	R103	VE-30012657	SMD RES.	1/16W 1K J
	R106	VE-30012713	SMD RES.	1/16W 75R J
	R107	VE-30012649	SMD RES.	1/16W 150R J
	R109	VE-30012713	SMD RES.	1/16W 75R J
	R110	VE-30012713	SMD RES.	1/16W 75R J
	R111	VE-30012649	SMD RES.	1/16W 150R J
	R113	VE-30012713	SMD RES.	1/16W 75R J
	R114	VE-30012713	SMD RES.	1/16W 75R J
	R115	VE-30012713	SMD RES.	1/16W 75R J
	R117	VE-30000792	CF RES.	1/4W 75R J
	R118	VE-30012713	SMD RES.	1/16W 75R J
	R121	VE-30012649	SMD RES.	1/16W 150R J
	R122	VE-30000792	CF RES.	1/4W 75R J
	R123	VE-30000792	CF RES.	1/4W 75R J
	R124	VE-30012649	SMD RES.	1/16W 150R J
	R126	VE-30012657	SMD RES.	1/16W 1K J
	R129	VE-30012713	SMD RES.	1/16W 75R J
	R135	VE-30012657	SMD RES.	1/16W 1K J
	R137	VE-30000466	CF RES.	1/4W 1K J
	R138	VE-30012657	SMD RES.	1/16W 1K J
	R139	VE-30012713	SMD RES.	1/16W 75R J
	R141	VE-30012657	SMD RES.	1/16W 1K J
	R145	VE-30012713	SMD RES.	1/16W 75R J
	R149	VE-30012703	SMD RES.	1/16W 56K J
	R151	VE-30012696	SMD RES.	1/16W 47K J
	R152	VE-30000752	CF RES.	1/4W 56K J
	R153	VE-30012657	SMD RES.	1/16W 1K J
	R154	VE-30000723	CF RES.	1/4W 47K J
	R155	VE-30012649	SMD RES.	1/16W 150R J
	R169	VE-30012703	SMD RES.	1/16W 56K J
	R171	VE-30012713	SMD RES.	1/16W 75R J
	R172	VE-30012692	SMD RES.	1/16W 4.7K J
	R174	VE-30012713	SMD RES.	1/16W 75R J
	R175	VE-30012713	SMD RES.	1/16W 75R J
	R176	VE-30012703	SMD RES.	1/16W 56K J
	R201	VE-30012674	SMD RES.	1/16W 27K J
	R202	VE-30012692	SMD RES.	1/16W 4.7K J
	R204	VE-30000459	CF RES.	1/4W 100R J
	R206	VE-30000459	CF RES.	1/4W 100R J
	R319	VE-30014076	SMD RES.	1/16W 4.7R J
	R320	VE-30014076	SMD RES.	1/16W 4.7R J
	R324	VE-30012667	SMD RES.	1/16W 220K J
	R328	VE-30012649	SMD RES.	1/16W 150R J
	R329	VE-30012692	SMD RES.	1/16W 4.7K J
	R332	VE-30012641	SMD RES.	1/16W 10K J
	R333	VE-30012702	SMD RES.	1/16W 560R J
	R338	VE-30012641	SMD RES.	1/16W 10K J
	R340	VE-30012644	SMD RES.	1/16W 12K J
	R341	VE-30012702	SMD RES.	1/16W 560R J
	R343	VE-30012659	SMD RES.	1/16W 2.2K J
	R370	VE-30012669	SMD RES.	1/16W 22K J
	R371	VE-30012669	SMD RES.	1/16W 22K J
	R391	VE-30012696	SMD RES.	1/16W 47K J
	R417	VE-30012510	SMD RES.	1/16W 100R J
	R418	VE-30012510	SMD RES.	1/16W 100R J
	R419	VE-30012649	SMD RES.	1/16W 150R J
	R420	VE-30000466	CF RES.	1/4W 1K J
	R421	VE-30012650	SMD RES.	1/16W 15K J
	R422	VE-30012659	SMD RES.	1/16W 2.2K J
	R423	VE-30012712	SMD RES.	1/16W 8.2K J
	R425	VE-30012510	SMD RES.	1/16W 100R J
	R426	VE-30012659	SMD RES.	1/16W 2.2K J
	R427	VE-30012674	SMD RES.	1/16W 27K J
	R428	VE-30012510	SMD RES.	1/16W 100R J
	R430	VE-30012702	SMD RES.	1/16W 560R J
	R431	VE-30012674	SMD RES.	1/16W 27K J
	R432	VE-30012707	SMD RES.	1/16W 680R J
	R433	VE-30012683	SMD RES.	1/16W 330K J
	R437	VE-30000466	CF RES.	1/4W 1K J
	R438	VE-30000466	CF RES.	1/4W 1K J
	R439	VE-30012657	SMD RES.	1/16W 1K J
	R440	VE-30012714	SMD RES.	1/16W 820R J
	R441	VE-30012674	SMD RES.	1/16W 27K J
	R442	VE-30000466	CF RES.	1/4W 1K J
	R446	VE-30012714	SMD RES.	1/16W 820R J
	R447	VE-30012714	SMD RES.	1/16W 820R J
	R448	VE-30012683	SMD RES.	1/16W 330K J
	R449	VE-30012659	SMD RES.	1/16W 2.2K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R450	VE-30012702	SMD RES.	1/16W 560R J
	R458	VE-30012510	SMD RES.	1/16W 100R J
	R459	VE-30012668	SMD RES.	1/16W 220R J
	R460	VE-30012668	SMD RES.	1/16W 220R J
	R461	VE-30012668	SMD RES.	1/16W 220R J
	R462	VE-30012510	SMD RES.	1/16W 100R J
	R467	VE-30000670	CF RES.	1/4W 330K J
	R468	VE-30000670	CF RES.	1/4W 330K J
	R469	VE-30000628	CF RES.	1/4W 2.7K J
	R471	VE-30014022	SMD RES.	1/16W 47R J
	R472	VE-30012662	SMD RES.	1/16W 2.7K J
	R474	VE-30012662	SMD RES.	1/16W 2.7K J
	R481	VE-30000466	CF RES.	1/4W 1K J
	R482	VE-30012657	SMD RES.	1/16W 1K J
	R483	VE-30012657	SMD RES.	1/16W 1K J
	R485	VE-30012657	SMD RES.	1/16W 1K J
	R486	VE-30012657	SMD RES.	1/16W 1K J
	R487	VE-30012657	SMD RES.	1/16W 1K J
	R507	VE-30000466	CF RES.	1/4W 1K J
	R508	VE-30012510	SMD RES.	1/16W 100R J
	R509	VE-30012641	SMD RES.	1/16W 10K J
	R510	VE-30012702	SMD RES.	1/16W 560R J
	R511	VE-30012657	SMD RES.	1/16W 1K J
	R512	VE-30000495	CF RES.	1/4W 1.2K J
	R513	VE-30000459	CF RES.	1/4W 100R J
	R514	VE-30000459	CF RES.	1/4W 100R J
	R515	VE-30012659	SMD RES.	1/16W 2.2K J
	R516	VE-30012659	SMD RES.	1/16W 2.2K J
	R517	VE-30012692	SMD RES.	1/16W 4.7K J
	R518	VE-30000471	CF RES.	1/4W 10K J
	R519	VE-30012698	SMD RES.	1/16W 5.6K J
	R525	VE-30012649	SMD RES.	1/16W 150R J
	R526	VE-30012641	SMD RES.	1/16W 10K J
	R527	VE-30012692	SMD RES.	1/16W 4.7K J
	R528	VE-30012698	SMD RES.	1/16W 5.6K J
	R529	VE-30012698	SMD RES.	1/16W 5.6K J
	R530	VE-30012698	SMD RES.	1/16W 5.6K J
	R532	VE-30012659	SMD RES.	1/16W 2.2K J
	R533	VE-30012644	SMD RES.	1/16W 12K J
	R534	VE-30000628	CF RES.	1/4W 2.7K J
	R537	VE-30012641	SMD RES.	1/16W 10K J
	R538	VE-30012698	SMD RES.	1/16W 5.6K J
	R539	VE-30012659	SMD RES.	1/16W 2.2K J
	R540	VE-30012644	SMD RES.	1/16W 12K J
	R545	VE-30012644	SMD RES.	1/16W 12K J
	R548	VE-30012641	SMD RES.	1/16W 10K J
	R554	VE-30012641	SMD RES.	1/16W 10K J
	R555	VE-30012659	SMD RES.	1/16W 2.2K J
	R556	VE-30012657	SMD RES.	1/16W 1K J
	R560	VE-30012674	SMD RES.	1/16W 27K J
	R561	VE-30012692	SMD RES.	1/16W 4.7K J
	R568	VE-30000594	CF RES.	1/4W 22K J
	R572	VE-30012659	SMD RES.	1/16W 2.2K J
	R573	VE-30012641	SMD RES.	1/16W 10K J
	R574	VE-30012657	SMD RES.	1/16W 1K J
	R603	VE-30000459	CF RES.	1/4W 100R J
	R604	VE-30012510	SMD RES.	1/16W 100R J
	R606	VE-30000471	CF RES.	1/4W 10K J
	R607	VE-30000554	CF RES.	1/4W 180R J
	R608	VE-30000859	MF RES.	1/2W 1R F
	R609	VE-30000711	CF RES.	1/2W 470R J
	R610	VE-30000599	CF RES.	1/4W 220K J
	R611	VE-30012708	SMD RES.	1/16W 68K J
	R614	VE-30012509	SMD RES.	1/16W 100K J
	R616	VE-30012669	SMD RES.	1/16W 22K J
	R617	VE-30000572	CF RES.	1/4W 2K J
	R630	VE-30012702	SMD RES.	1/16W 560R J
	R634	VE-30000633	CF RES.	1/4W 27K J
	R639	VE-30000471	CF RES.	1/4W 10K J
	R640	VE-30000628	CF RES.	1/4W 2.7K J
	R646	VE-30000531	CF RES.	1/4W 15K J
	R647	VE-30000466	CF RES.	1/4W 1K J
⚠	R648	VE-30001246	FUSE RES.	1W 0.47R J
	R650	VE-30012702	SMD RES.	1/16W 560R J
	R651	VE-30012668	SMD RES.	1/16W 220R J
⚠	R656	VE-30001230	FUSE RES.	1/2W 27R J
⚠	R657	VE-30001228	FUSE RES.	1/2W 2.2R J
	R662	VE-30012674	SMD RES.	1/16W 27K J
	R666	VE-30000815	CF RES.	1/4W 8.2K J

[AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN]

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R668	VE-30000790	CF RES.	1/4W 6.8R J
	R669	VE-30012510	SMD RES.	1/16W 100R J
	R670	VE-30012510	SMD RES.	1/16W 100R J
	R674	VE-30012662	SMD RES.	1/16W 2.7K J
⚠	R675	VE-30001244	FUSE RES.	1/2W 0.47R J
	R677	VE-30001124	MO RES.	3W 220R J
	R678	VE-30014022	SMD RES.	1/16W 47R J
	R680	VE-30000477	CF RES.	1/4W 100K J
	R681	VE-30012509	SMD RES.	1/16W 100K J
	R682	VE-30008856	MO RES.	2W 270R J
	R683	VE-30017083	WW RES.	5W 2.2K J RAD.
	R689	VE-30000718	CF RES.	1/4W 4.7K J
	R690	VE-30000466	CF RES.	1/4W 1K J
	R691	VE-30012696	SMD RES.	1/16W 47K J
	R692	VE-30012509	SMD RES.	1/16W 100K J
	R693	VE-30012708	SMD RES.	1/16W 68K J
	R694	VE-30000689	CF RES.	1/4W 3.9K J
	R695	VE-30000471	CF RES.	1/4W 10K J
	R696-Y	VE-30001350	ZENER DIODE	12V
	R697	VE-30000712	CF RES.	1/4W 470R J
	R698	VE-30012657	SMD RES.	1/16W 1K J
	R699	VE-30012685	SMD RES.	1/16W 33K J
	R700	VE-30012649	SMD RES.	1/16W 150R J
	R701	VE-30000459	CF RES.	1/4W 100R J
	R703	VE-30000459	CF RES.	1/4W 100R J
	R705	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30012702	SMD RES.	1/16W 560R J
	R717	VE-30012702	SMD RES.	1/16W 560R J
	R719	VE-30012657	SMD RES.	1/16W 1K J
	R721	VE-30012510	SMD RES.	1/16W 100R J
	R722	VE-30012510	SMD RES.	1/16W 100R J
	R723	VE-30012510	SMD RES.	1/16W 100R J
	R724	VE-30012510	SMD RES.	1/16W 100R J
	R801	VE-30000718	CF RES.	1/4W 4.7K J
	R803	VE-30012659	SMD RES.	1/16W 2.2K J
	R805	VE-30000650	CF RES.	1/4W 33R J
	R806	VE-30000982	MF RES.	1/4W 4.7K J
	R807	VE-30001173	MO RES.	1W 0.47R J
	R809	VE-30007784	MO RES.	5W 33K J(RADIAL)
⚠	R810	VE-30001257	MG RES.	1/2W 4.7M J
	R811	VE-30000718	CF RES.	1/4W 4.7K J
	R812	VE-30012641	SMD RES.	1/16W 10K J
	R813	VE-30000466	CF RES.	1/4W 1K J
	R814	VE-30000466	CF RES.	1/4W 1K J
	R817	VE-30000880	MF RES.	1/4W 130K F
	R818	VE-30012675	SMD RES.	1/16W 2K J
	R819	VE-30000526	CF RES.	1/4W 1.5K J
	R828	VE-30000530	CF RES.	1/2W 15K J
	R829	VE-30000530	CF RES.	1/2W 15K J
	R834	VE-30001159	MO RES.	1W 0.33R J
	R836	VE-30012662	SMD RES.	1/16W 2.7K J
	R839	VE-30000526	CF RES.	1/4W 1.5K J
	R842	VE-30014128	SMD RES.	1/16W 33R J
	R844	VE-30012641	SMD RES.	1/16W 10K J
	R845	VE-30012509	SMD RES.	1/16W 100K J
	R846	VE-30012692	SMD RES.	1/16W 4.7K J
	R847	VE-30014128	SMD RES.	1/16W 33R J
	R848	VE-30012641	SMD RES.	1/16W 10K J
	R849	VE-30012510	SMD RES.	1/16W 100R J
	R851	VE-30000718	CF RES.	1/4W 4.7K J
	R852	VE-30000650	CF RES.	1/4W 33R J
	R853	VE-30012642	SMD RES.	1/16W 120K J
	R855	VE-30000459	CF RES.	1/4W 100R J
	R856	VE-30012694	SMD RES.	1/16W 470K J

CAPACITOR

C141	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
C142	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
C143	VE-30012589	SMD CAP.	4.7NF 50V K
C144	VE-30012589	SMD CAP.	4.7NF 50V K
C145	VE-30012589	SMD CAP.	4.7NF 50V K
C146	VE-30012589	SMD CAP.	4.7NF 50V K
C147	VE-30012589	SMD CAP.	4.7NF 50V K
C148	VE-30012589	SMD CAP.	4.7NF 50V K
C149	VE-30012589	SMD CAP.	4.7NF 50V K
C150	VE-30012589	SMD CAP.	4.7NF 50V K
C155	VE-30012560	SMD CAP.	100PF 50V J
C157	VE-30012560	SMD CAP.	100PF 50V J
C159	VE-30000352	EL CAP.	100UF 16V M
C160	VE-30000345	EL CAP.	10UF 50V M
C161	VE-30000345	EL CAP.	10UF 50V M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C162	VE-30012573	SMD CAP.	47PF 50V J
	C164	VE-30012692	SMD RES.	1/16W 4.7K J
	C165	VE-30000413	EL CAP.	4.7UF 50V M
	C201	VE-30000400	EL CAP.	47UF 50V M
	C205	VE-30000345	EL CAP.	10UF 50V M
	C206	VE-30012610	SMD CAP.	10NF 50V J
	C207	VE-30012610	SMD CAP.	10NF 50V J
	C230	VE-30016654	SMD CAP.	100NF 16V K R
	C246	VE-30000295	CER CAP.	100NF 50V Z F
	C303	VE-30000100	MKT CAP.	330NF 63V J
	C305	VE-30012590	SMD CAP.	47NF 50V K
	C310	VE-30000345	EL CAP.	10UF 50V M
	C333	VE-30000083	MKT CAP.	150NF 63V J
	C363	VE-30000083	MKT CAP.	150NF 63V J
	C364	VE-30012590	SMD CAP.	47NF 50V K
	C366	VE-30000407	EL CAP.	470UF 16V M
	C368	VE-30012590	SMD CAP.	47NF 50V K
	C404	VE-30000190	CER CAP.	100PF 50V J CH
	C408	VE-30012586	SMD CAP.	22NF 50V K
	C409	VE-30000345	EL CAP.	10UF 50V M
	C410	VE-30000384	EL CAP.	2.2UF 50V M
	C411	VE-30000345	EL CAP.	10UF 50V M
	C412	VE-30016654	SMD CAP.	100NF 16V K R
	C413	VE-30000362	EL CAP.	1UF 50V M
	C414	VE-30012585	SMD CAP.	2.2NF 50V K R
	C415	VE-30012581	SMD CAP.	1NF 50V K R
	C416	VE-30000362	EL CAP.	1UF 50V M
	C417	VE-30000362	EL CAP.	1UF 50V M
	C418	VE-30016654	SMD CAP.	100NF 16V K R
	C419	VE-30000384	EL CAP.	2.2UF 50V M
	C420	VE-30000100	MKT CAP.	330NF 63V J
	C422	VE-30000352	EL CAP.	100UF 16V M
	C423	VE-30000352	EL CAP.	100UF 16V M
	C424	VE-30000352	EL CAP.	100UF 16V M
	C425	VE-30016654	SMD CAP.	100NF 16V K R
	C427	VE-30016654	SMD CAP.	100NF 16V K R
	C429	VE-30012589	SMD CAP.	4.7NF 50V K
	C430	VE-30016654	SMD CAP.	100NF 16V K R
	C431	VE-30000362	EL CAP.	1UF 50V M
	C432	VE-30016654	SMD CAP.	100NF 16V K R
	C433	VE-30000345	EL CAP.	10UF 50V M
	C434	VE-30016654	SMD CAP.	100NF 16V K R
	C435	VE-30016654	SMD CAP.	100NF 16V K R
	C436	VE-30000384	EL CAP.	2.2UF 50V M
	C437	VE-30016654	SMD CAP.	100NF 16V K R
	C438	VE-30016654	SMD CAP.	100NF 16V K R
	C439	VE-30016654	SMD CAP.	100NF 16V K R
	C440	VE-30000295	CER CAP.	100NF 50V Z F
	C441	VE-30012582	SMD CAP.	10NF 50V K R
	C442	VE-30000362	EL CAP.	1UF 50V M
	C443	VE-30000362	EL CAP.	1UF 50V M
	C444	VE-30000384	EL CAP.	2.2UF 50V M
	C448	VE-30012586	SMD CAP.	22NF 50V K
	C449	VE-30012560	SMD CAP.	100PF 50V J
	C453	VE-30000352	EL CAP.	100UF 16V M
	C455	VE-30000345	EL CAP.	10UF 50V M
	C459	VE-30012560	SMD CAP.	100PF 50V J
	C501	VE-30016654	SMD CAP.	100NF 16V K R
	C502	VE-30000400	EL CAP.	47UF 50V M
	C504	VE-30016654	SMD CAP.	100NF 16V K R
	C505	VE-30012589	SMD CAP.	4.7NF 50V K
	C507	VE-30000345	EL CAP.	10UF 50V M
	C510	VE-30016654	SMD CAP.	100NF 16V K R
	C511	VE-30012566	SMD CAP.	22PF 50V J
	C513	VE-30000345	EL CAP.	10UF 50V M
	C514	VE-30016654	SMD CAP.	100NF 16V K R
	C515	VE-30012560	SMD CAP.	100PF 50V J
	C517	VE-30016654	SMD CAP.	100NF 16V K R
	C518	VE-30016654	SMD CAP.	100NF 16V K R
	C519	VE-30012560	SMD CAP.	100PF 50V J
	C520	VE-30012560	SMD CAP.	100PF 50V J
	C521	VE-30012562	SMD CAP.	15PF 50V J
	C522	VE-30012562	SMD CAP.	15PF 50V J
	C523	VE-30012585	SMD CAP.	2.2NF 50V K R
	C524	VE-30012566	SMD CAP.	22PF 50V J
	C525	VE-30012566	SMD CAP.	22PF 50V J
	C526	VE-30016654	SMD CAP.	100NF 16V K R
	C527	VE-30000345	EL CAP.	10UF 50V M
	C529	VE-30012589	SMD CAP.	4.7NF 50V K
	C530	VE-30012589	SMD CAP.	4.7NF 50V K
	C532	VE-30016654	SMD CAP.	100NF 16V K R
	C536	VE-30000295	CER CAP.	100NF 50V Z F
	C541	VE-30000362	EL CAP.	1UF 50V M

[AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN]

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C542	VE-30000107	MKT CAP.	47NF 250V J
	C543	VE-30000431	CER CAP.	100PF 1KV M
	C544	VE-30000345	EL CAP.	10UF 50V M
	C547	VE-30000345	EL CAP.	10UF 50V M
	C565	VE-30016654	SMD CAP.	100NF 16V K R
	C566	VE-30016654	SMD CAP.	100NF 16V K R
	C567	VE-30000431	CER CAP.	100PF 1KV M
	C602	VE-30017319	MKT CAP.	120NF 63V J
	C604	VE-30000356	EL CAP.	100UF 63V M
	C605	VE-30000360	EL CAP.	1000UF 25V M
	C607	VE-30012581	SMD CAP.	1NF 50V K R
⚠	C618	VE-30000159	MKP CAP.	4.7NF 1.6KV J
⚠	C621	VE-30000179	MKP CAP.	9.1NF 1600V %3.5
	C622	VE-30000121	KP CAP.	27NF 630V J
⚠	C625	VE-30000156	MKP CAP.	430NF 250V J
	C627	VE-30000167	MKP CAP.	560NF 250V J
	C629	VE-30000177	MKP CAP.	820NF 250V J
	C632	VE-30000100	MKT CAP.	330NF 63V J
	C635	VE-30000385	EL CAP.	2.2UF 250V M
	C636	VE-30000387	EL CAP.	33UF 50V M
	C640	VE-30000100	MKT CAP.	330NF 63V J
	C641	VE-30000090	MKT CAP.	22NF 100V J
	C642	VE-30000407	EL CAP.	470UF 16V M
	C644	VE-30000409	EL CAP.	470UF 25V M
	C645	VE-30000090	MKT CAP.	22NF 100V J
	C646	VE-30000100	MKT CAP.	330NF 63V J
	C647	VE-30007748	EL CAP.	1000UF 35V M
	C648	VE-30000394	EL CAP.	3.3UF 160V M
	C649	VE-30000295	CER CAP.	100NF 50V Z F
	C652	VE-30000330	CER CAP.	4.7NF 50V K B
	C653	VE-30000107	MKT CAP.	47NF 250V J
	C655	VE-30000415	EL CAP.	4.7UF 250V M
	C700	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C701	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C702	VE-30012576	SMD CAP.	56PF 50V J CH
	C703	VE-30012576	SMD CAP.	56PF 50V J CH
	C704	VE-30012576	SMD CAP.	56PF 50V J CH
	C705	VE-30000345	EL CAP.	10UF 50V M
	C706	VE-30000345	EL CAP.	10UF 50V M
	C708	VE-30016654	SMD CAP.	100NF 16V K R
	C712	VE-30000345	EL CAP.	10UF 50V M
	C713	VE-30016654	SMD CAP.	100NF 16V K R
	C714	VE-30000100	MKT CAP.	330NF 63V J
	C716	VE-30000100	MKT CAP.	330NF 63V J
	C717	VE-30000100	MKT CAP.	330NF 63V J
	C718	VE-30000100	MKT CAP.	330NF 63V J
	C719	VE-30016654	SMD CAP.	100NF 16V K R
	C720	VE-30000345	EL CAP.	10UF 50V M
	C721	VE-30000100	MKT CAP.	330NF 63V J
	C723	VE-30000100	MKT CAP.	330NF 63V J
	C724	VE-30000345	EL CAP.	10UF 50V M
	C729	VE-30016654	SMD CAP.	100NF 16V K R
	C730	VE-30000393	EL CAP.	3.3UF 50V M
	C733	VE-30000345	EL CAP.	10UF 50V M
	C734	VE-30000345	EL CAP.	10UF 50V M
	C735	VE-30016654	SMD CAP.	100NF 16V K R
	C736	VE-30000345	EL CAP.	10UF 50V M
	C737	VE-30000384	EL CAP.	2.2UF 50V M
	C738	VE-30000384	EL CAP.	2.2UF 50V M
	C739	VE-30000384	EL CAP.	2.2UF 50V M
	C740	VE-30000384	EL CAP.	2.2UF 50V M
	C741	VE-30012589	SMD CAP.	4.7NF 50V K
	C742	VE-30012589	SMD CAP.	4.7NF 50V K
	C745	VE-30016654	SMD CAP.	100NF 16V K R
⚠	C801	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C802	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C803	VE-30000433	CER CAP.	1NF 1KV M B
⚠	C804	VE-30000433	CER CAP.	1NF 1KV M B
	C808	VE-30012590	SMD CAP.	47NF 50V K
	C809	VE-30000420	EL CAP.	150UF 400V M
	C810	VE-30000387	EL CAP.	33UF 50V M
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C812	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
⚠	C816	VE-30000440	CER CAP.	2.2NF 4KV M
	C817	VE-30000198	CER CAP.	120PF 500V J SL
	C818	VE-30012590	SMD CAP.	47NF 50V K
	C819	VE-30012590	SMD CAP.	47NF 50V K
	C822	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C826	VE-30000406	EL CAP.	47UF 250V M (HR)
	C827	VE-30000411	EL CAP.	470UF 16V M
	C828	VE-30012590	SMD CAP.	47NF 50V K
	C829	VE-30000407	EL CAP.	470UF 16V M
	C830	VE-30000383	EL CAP.	2200UF 25V M

⚠	Symbol No.	Part No.	Part Name	Description
	C832	VE-30012590	SMD CAP.	47NF 50V K
	C833	VE-30000407	EL CAP.	470UF 16V M
	C834	VE-30012590	SMD CAP.	47NF 50V K
	C835	VE-30012590	SMD CAP.	47NF 50V K
	C838	VE-30000407	EL CAP.	470UF 16V M
	C839	VE-30000407	EL CAP.	470UF 16V M
	C840	VE-30000407	EL CAP.	470UF 16V M
	C848	VE-30000407	EL CAP.	470UF 16V M
	C850	VE-30000383	EL CAP.	2200UF 25V M
	C851	VE-30012590	SMD CAP.	47NF 50V K
⚠	C852	VE-30000440	CER CAP.	2.2NF 4KV M
	C857	VE-30000106	MKT CAP.	47NF 100V J
	C858	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	C859	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C860	VE-30000296	CER CAP.	100NF 100V Z F
	C872	VE-30007708	CER CAP.	1NF 1KV K (PULSE)

TRANSF

⚠	Symbol No.	Part No.	Part Name	Description
	TR600	VE-30002090	LINE DRIVER	
⚠	TR601	VE-30017522	FBT TRF	
⚠	TR802	VE-30018785	SMPS TRF	

COIL

Symbol No.	Part No.	Part Name	Description
L101	VE-30001971	FERRITE BEAT	
L102	VE-30001971	FERRITE BEAT	
L106	VE-30001971	FERRITE BEAT	
L108	VE-30001971	FERRITE BEAT	
L109	VE-30001971	FERRITE BEAT	
L110	VE-30001971	FERRITE BEAT	
L111	VE-30001971	FERRITE BEAT	
L112	VE-30001971	FERRITE BEAT	
L113	VE-30001971	FERRITE BEAT	
L114	VE-30001971	FERRITE BEAT	
L115	VE-30001971	FERRITE BEAT	
L116	VE-30001971	FERRITE BEAT	
L117	VE-30001971	FERRITE BEAT	
L201	VE-30001979	FIXED COIL	1UH
L210	VE-30001971	FERRITE BEAT	
L215	VE-30001971	FERRITE BEAT	
L401	VE-30001971	FERRITE BEAT	
L402	VE-30001992	FIXED COIL	10UH
L403	VE-30001971	FERRITE BEAT	
L405	VE-30014048	ADJ. COIL	44MHZ
L406	VE-30001971	FERRITE BEAT	
L408	VE-30001992	FIXED COIL	10UH
L501	VE-30001971	FERRITE BEAT	
L502	VE-30001971	FERRITE BEAT	
L503	VE-30001971	FERRITE BEAT	
L504	VE-30001971	FERRITE BEAT	
L600	VE-30002031	FIXED COIL	15MH
L602	VE-30002156	LINEARITY COIL	30UH
L603	VE-30002026	FIXED COIL	1MH
L700	VE-30001971	FERRITE BEAT	
L701	VE-30001971	FERRITE BEAT	
L702	VE-30001992	FIXED COIL	10UH
L703	VE-30001971	FERRITE BEAT	
L704	VE-30001971	FERRITE BEAT	
L801	VE-30002011	CHOKE COIL	150UH
L803	VE-30001992	FIXED COIL	10UH

DIODE

Symbol No.	Part No.	Part Name	Description
D105	VE-30007760	ZENER DIODE	
D106	VE-30007760	ZENER DIODE	
D107	VE-30007760	ZENER DIODE	
D303	VE-30001329	DIODE	
D405	VE-30007763	ZENER DIODE	
D407	VE-30001284	DIODE	
D408	VE-30001285	DIODE	
D409	VE-30001284	DIODE	
D413	VE-30018526	ZENER DIODE	
D501	VE-30001285	DIODE	
D505	VE-30001285	DIODE	
D506	VE-30001284	DIODE	
D512	VE-30001285	DIODE	
D513	VE-30001369	ZENER DIODE	
D533	VE-30001377	ZENER DIODE	

[AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN]

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D601	VE-30001329	DIODE	
	D603	VE-30001285	DIODE	
	D605	VE-30001320	DIODE	
	D606	VE-30001323	DIODE	
	D609	VE-30001318	DIODE	
	D610	VE-30001318	DIODE	
	D613	VE-30001318	DIODE	
	D614	VE-30001285	DIODE	
	D616	VE-30003696	DIODE	
	D617	VE-30001318	DIODE	
	D651	VE-30001285	DIODE	
	D653	VE-30001285	DIODE	
	D656	VE-30007763	ZENER DIODE	
	D657	VE-30007763	ZENER DIODE	
	D658	VE-30007763	ZENER DIODE	
	D659	VE-30001350	ZENER DIODE	
	D660	VE-30001347	ZENER DIODE	
	D661	VE-30001350	ZENER DIODE	
	D700	VE-30001285	DIODE	
	D701	VE-30001369	ZENER DIODE	
	D800	VE-30001318	DIODE	
	D801	VE-30001372	ZENER DIODE	
	D802	VE-30001318	DIODE	
	D803	VE-30001315	DIODE	
	D804	VE-30001318	DIODE	
	D805	VE-30001315	DIODE	
	D806	VE-30001315	DIODE	
	D808	VE-20092405	CN.ASY	
	D809	VE-30001329	DIODE	
	D810	VE-30009366	DIODE	
	D811	VE-30009366	DIODE	
	D812	VE-30001285	DIODE	
	D889	VE-30001384	TR	
⚠	D891	VE-30007758	BRIDGE DIODE	
	D892	VE-30001318	DIODE	
	D893	VE-30001318	DIODE	
	D894	VE-30001285	DIODE	
	D897	VE-30001329	DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q104	VE-30001457	TR	
	Q106	VE-30001457	TR	
	Q141	VE-30001457	TR	
	Q142	VE-30001457	TR	
	Q307	VE-30001457	TR	
	Q316	VE-30001458	TR	
	Q403	VE-30001457	TR	
	Q404	VE-30001457	TR	
	Q503	VE-30001457	TR	
	Q504	VE-30001458	TR	
	Q600	VE-30001435	TR	
⚠	Q601	VE-30001441	TR	H.OUT
	Q602	VE-30001429	TR	
	Q603	VE-30001458	TR	
	Q604	VE-30001457	TR	
	Q605	VE-30001458	TR	
	Q700	VE-30001458	TR	
	Q801	VE-30001386	TR	
	Q802	VE-30001457	TR	
	Q804	VE-30001454	TR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC301	VE-30016113	IC	
	IC403	VE-30014521	IC	
	IC500	VE-20099532	IC	(SERVICE)
	IC501	VE-20093395	IC	(MICOM)
	IC601	VE-30013985	IC	
	IC700	VE-30013658	IC	
	IC800	VE-30011968	IC	
⚠	IC801	VE-30015087	IC	
	IC802	VE-30001622	IC	
	IC803	VE-30001500	IC	
	IC804	VE-30001622	IC	
	IC818	VE-30001506	IC	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
⚠	TR801	VE-30002104	LINE FILTER	
⚠	F801	VE-30001731	FUSE	2.5A
⚠	TH800	VE-30001270	PTC	9 OHM
	TU201	VE-30009637	TUNER	
	VR800	VE-30001064	RES ADJ	
	X401	VE-30001749	XTAL	
	X402	VE-30015592	XTAL	
	X501	VE-30002851	XTAL	
	X700	VE-30001756	XTAL	
	Z401	VE-30001705	SAW FILTER	
	Z402	VE-30015591	SAW FILTER	

[AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN]

CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R900	30000788	CF RES.	1/4W 6.8M J
	R902	30000459	CF RES.	1/4W 100R J
	R903	30000459	CF RES.	1/4W 100R J
	R904	30000459	CF RES.	1/4W 100R J
	R906	30000535	CF RES.	1/2W 150K J
	R907	30000477	CF RES.	1/4W 100K J
	R908	30000477	CF RES.	1/4W 100K J
	R909	30000525	CF RES.	1/2W 1.5K J
	R910	30000525	CF RES.	1/2W 1.5K J
	R911	30000525	CF RES.	1/2W 1.5K J
	R912	30000477	CF RES.	1/4W 100K J
	R913	30000525	CF RES.	1/2W 1.5K J
	R914	30001084	MO RES.	1W 1K J
	R916	30001170	MO RES.	1W 4.7K J
⚠	R917	30001208	FUSE RES.	1W 10R J
	R918	30000471	CF RES.	1/4W 10K J
	R921	30000599	CF RES.	1/4W 220K J
	R922	30000590	CF RES.	1/4W 2.2K J
	CAPACITOR			
	C900	30000075	MKT CAP.	100NF 250V K (DC)
	C902	30000415	EL CAP.	4.7UF 250V M
	C903	30000438	CER CAP.	2.2NF 2KV
	C904	30000295	CER CAP.	100NF 50V Z F
	C905	30000234	CER CAP.	270PF 50V J SL
	C906	30000350	EL CAP.	10UF 250V M
	C907	30000075	MKT CAP.	100NF 250V K (DC)
	C909	30000385	EL CAP.	2.2UF 250V M
	C910	30000438	CER CAP.	2.2NF 2KV
	C911	30000433	CER CAP.	1NF 1KV M B
	COIL			
	L900	30002170	COIL	
	DIODE			
	D901	30001329	DIODE	
	D902	30001318	DIODE	
	D903	30001329	DIODE	
	D904	30001329	DIODE	
	D905	30001284	DIODE	
	D906	30001284	DIODE	
	D907	30001284	DIODE	
	D908	30001284	DIODE	
	D909	30001344	ZENER DIODE	
	NOT1	30001329	DIODE	
	TRANSISTOR			
	Q900	30001427	TR	
	Q901	30001454	TR	
	IC			
	IC900	30008721	IC	
	OTHERS			
⚠	PL902	30001855	CRT SOCKET	
	SG901	30000428	SPARK GAP	300V
	SG902	30000428	SPARK GAP	300V
	SG903	30000428	SPARK GAP	300V
	SG904	30000428	SPARK GAP	300V

FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R2	VE-30000526	CF RES.	1/4W 1.5K J
	R3	VE-30000770	CF RES.	1/4W 680R J
	R4	VE-30000712	CF RES.	1/4W 470R J
	R5	VE-30000622	CF RES.	1/4W 270R J
	DIODE			
	D1	VE-30001279	LED RED/GREEN	
	IC			
	IC1	VE-30001670	PREAMPLIFIER	
	OTHERS			
	SW1	VE-30002181	SWITCH TACT	
	SW2	VE-30002181	SWITCH TACT	
	SW3	VE-30002181	SWITCH TACT	
	SW4	VE-30002181	SWITCH TACT	
	SW5	VE-30002181	SWITCH TACT	

FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R109	VE-30000594	CF RES.	1/4W 22K J
	R110	VE-30000712	CF RES.	1/4W 470R J
	R113	VE-30000744	CF RES.	1/4W 560R J
	R114	VE-30000744	CF RES.	1/4W 560R J
	R115	VE-30000712	CF RES.	1/4W 470R J
	R116	VE-30000712	CF RES.	1/4W 470R J
	CAPACITOR			
	C103	VE-30000213	CER CAP.	180PF 50V J
	C104	VE-30000213	CER CAP.	180PF 50V J
	C106	VE-30000190	CER CAP.	100PF 50V J
	COIL			
	L103	VE-30001996	FIXED COIL	22UH Q40 K
	L104	VE-30001996	FIXED COIL	22UH Q40 K

PRINTED WIRING BOARD PARTS LIST

[AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP]

MAIN P.W. BOARD ASS'Y (VE-20101576)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R102	VE-30012657	SMD RES.	1/16W 1K J
	R103	VE-30012657	SMD RES.	1/16W 1K J
	R106	VE-30012713	SMD RES.	1/16W 75R J
	R107	VE-30012649	SMD RES.	1/16W 150R J
	R109	VE-30012713	SMD RES.	1/16W 75R J
	R110	VE-30012713	SMD RES.	1/16W 75R J
	R111	VE-30012649	SMD RES.	1/16W 150R J
	R113	VE-30012713	SMD RES.	1/16W 75R J
	R114	VE-30012713	SMD RES.	1/16W 75R J
	R115	VE-30012713	SMD RES.	1/16W 75R J
	R117	VE-30000792	CF RES.	1/4W 75R J
	R118	VE-30012713	SMD RES.	1/16W 75R J
	R121	VE-30012649	SMD RES.	1/16W 150R J
	R122	VE-30000792	CF RES.	1/4W 75R J
	R123	VE-30000792	CF RES.	1/4W 75R J
	R124	VE-30012649	SMD RES.	1/16W 150R J
	R126	VE-30012657	SMD RES.	1/16W 1K J
	R129	VE-30012713	SMD RES.	1/16W 75R J
	R135	VE-30012657	SMD RES.	1/16W 1K J
	R137	VE-30000466	CF RES.	1/4W 1K J
	R138	VE-30012657	SMD RES.	1/16W 1K J
	R139	VE-30012713	SMD RES.	1/16W 75R J
	R141	VE-30012657	SMD RES.	1/16W 1K J
	R145	VE-30012713	SMD RES.	1/16W 75R J
	R149	VE-30012703	SMD RES.	1/16W 56K J
	R151	VE-30012696	SMD RES.	1/16W 47K J
	R152	VE-30000752	CF RES.	1/4W 56K J
	R153	VE-30012657	SMD RES.	1/16W 1K J
	R154	VE-30000723	CF RES.	1/4W 47K J
	R155	VE-30012649	SMD RES.	1/16W 150R J
	R169	VE-30012703	SMD RES.	1/16W 56K J
	R171	VE-30012713	SMD RES.	1/16W 75R J
	R172	VE-30012692	SMD RES.	1/16W 4.7K J
	R174	VE-30012713	SMD RES.	1/16W 75R J
	R175	VE-30012713	SMD RES.	1/16W 75R J
	R176	VE-30012703	SMD RES.	1/16W 56K J
	R201	VE-30012674	SMD RES.	1/16W 27K J
	R202	VE-30012692	SMD RES.	1/16W 4.7K J
	R204	VE-30000459	CF RES.	1/4W 100R J
	R206	VE-30000459	CF RES.	1/4W 100R J
	R319	VE-30014076	SMD RES.	1/16W 4.7R J
	R320	VE-30014076	SMD RES.	1/16W 4.7R J
	R324	VE-30012667	SMD RES.	1/16W 220K J
	R328	VE-30012649	SMD RES.	1/16W 150R J
	R329	VE-30012692	SMD RES.	1/16W 4.7K J
	R332	VE-30012641	SMD RES.	1/16W 10K J
	R333	VE-30012702	SMD RES.	1/16W 560R J
	R338	VE-30012641	SMD RES.	1/16W 10K J
	R340	VE-30012644	SMD RES.	1/16W 12K J
	R341	VE-30012702	SMD RES.	1/16W 560R J
	R343	VE-30012659	SMD RES.	1/16W 2.2K J
	R370	VE-30012669	SMD RES.	1/16W 22K J
	R371	VE-30012669	SMD RES.	1/16W 22K J
	R391	VE-30012696	SMD RES.	1/16W 47K J
	R402	VE-30012692	SMD RES.	1/16W 4.7K J
	R407	VE-30000471	CF RES.	1/4W 10K J
	R410	VE-30000471	CF RES.	1/4W 10K J
	R412	VE-30000723	CF RES.	1/4W 47K J
	R417	VE-30012510	SMD RES.	1/16W 100R J
	R418	VE-30012510	SMD RES.	1/16W 100R J
	R419	VE-30012649	SMD RES.	1/16W 150R J
	R420	VE-30000466	CF RES.	1/4W 1K J
	R421	VE-30012650	SMD RES.	1/16W 15K J
	R422	VE-30012659	SMD RES.	1/16W 2.2K J
	R423	VE-30012712	SMD RES.	1/16W 8.2K J
	R425	VE-30012510	SMD RES.	1/16W 100R J
	R426	VE-30012659	SMD RES.	1/16W 2.2K J
	R427	VE-30012674	SMD RES.	1/16W 27K J
	R428	VE-30012510	SMD RES.	1/16W 100R J
	R430	VE-30012702	SMD RES.	1/16W 560R J
	R431	VE-30012674	SMD RES.	1/16W 27K J
	R432	VE-30012707	SMD RES.	1/16W 680R J
	R433	VE-30012683	SMD RES.	1/16W 330K J
	R437	VE-30000466	CF RES.	1/4W 1K J
	R438	VE-30000466	CF RES.	1/4W 1K J
	R439	VE-30012657	SMD RES.	1/16W 1K J
	R440	VE-30012714	SMD RES.	1/16W 820R J
	R441	VE-30012674	SMD RES.	1/16W 27K J
	R442	VE-30000466	CF RES.	1/4W 1K J
	R446	VE-30012714	SMD RES.	1/16W 820R J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R447	VE-30012714	SMD RES.	1/16W 820R J
	R448	VE-30012683	SMD RES.	1/16W 330K J
	R449	VE-30012659	SMD RES.	1/16W 2.2K J
	R450	VE-30012702	SMD RES.	1/16W 560R J
	R458	VE-30012510	SMD RES.	1/16W 100R J
	R459	VE-30012668	SMD RES.	1/16W 220R J
	R460	VE-30012668	SMD RES.	1/16W 220R J
	R461	VE-30012668	SMD RES.	1/16W 220R J
	R462	VE-30012510	SMD RES.	1/16W 100R J
	R467	VE-30000670	CF RES.	1/4W 330K J
	R468	VE-30000670	CF RES.	1/4W 330K J
	R469	VE-30000628	CF RES.	1/4W 2.7K J
	R471	VE-30014022	SMD RES.	1/16W 47R J
	R472	VE-30012662	SMD RES.	1/16W 2.7K J
	R474	VE-30012662	SMD RES.	1/16W 2.7K J
	R481	VE-30000466	CF RES.	1/4W 1K J
	R482	VE-30012657	SMD RES.	1/16W 1K J
	R483	VE-30012657	SMD RES.	1/16W 1K J
	R485	VE-30012657	SMD RES.	1/16W 1K J
	R486	VE-30012657	SMD RES.	1/16W 1K J
	R487	VE-30012657	SMD RES.	1/16W 1K J
	R507	VE-30000466	CF RES.	1/4W 1K J
	R508	VE-30012510	SMD RES.	1/16W 100R J
	R509	VE-30012641	SMD RES.	1/16W 10K J
	R510	VE-30012702	SMD RES.	1/16W 560R J
	R511	VE-30012657	SMD RES.	1/16W 1K J
	R512	VE-30000495	CF RES.	1/4W 1.2K J
	R513	VE-30000459	CF RES.	1/4W 100R J
	R514	VE-30000459	CF RES.	1/4W 100R J
	R515	VE-30012659	SMD RES.	1/16W 2.2K J
	R516	VE-30012659	SMD RES.	1/16W 2.2K J
	R517	VE-30012692	SMD RES.	1/16W 4.7K J
	R518	VE-30000471	CF RES.	1/4W 10K J
	R519	VE-30012698	SMD RES.	1/16W 5.6K J
	R525	VE-30012649	SMD RES.	1/16W 150R J
	R526	VE-30012641	SMD RES.	1/16W 10K J
	R527	VE-30012692	SMD RES.	1/16W 4.7K J
	R528	VE-30012698	SMD RES.	1/16W 5.6K J
	R529	VE-30012698	SMD RES.	1/16W 5.6K J
	R530	VE-30012698	SMD RES.	1/16W 5.6K J
	R532	VE-30012659	SMD RES.	1/16W 2.2K J
	R533	VE-30012644	SMD RES.	1/16W 12K J
	R534	VE-30000628	CF RES.	1/4W 2.7K J
	R537	VE-30012641	SMD RES.	1/16W 10K J
	R538	VE-30012698	SMD RES.	1/16W 5.6K J
	R539	VE-30012659	SMD RES.	1/16W 2.2K J
	R540	VE-30012644	SMD RES.	1/16W 12K J
	R545	VE-30012644	SMD RES.	1/16W 12K J
	R548	VE-30012641	SMD RES.	1/16W 10K J
	R552	VE-30012692	SMD RES.	1/16W 4.7K J
	R554	VE-30012641	SMD RES.	1/16W 10K J
	R555	VE-30012659	SMD RES.	1/16W 2.2K J
	R556	VE-30012657	SMD RES.	1/16W 1K J
	R560	VE-30012674	SMD RES.	1/16W 27K J
	R561	VE-30012692	SMD RES.	1/16W 4.7K J
	R568	VE-30000594	CF RES.	1/4W 22K J
	R572	VE-30012659	SMD RES.	1/16W 2.2K J
	R573	VE-30012641	SMD RES.	1/16W 10K J
	R574	VE-30012657	SMD RES.	1/16W 1K J
	R603	VE-30000459	CF RES.	1/4W 100R J
	R604	VE-30012510	SMD RES.	1/16W 100R J
	R606	VE-30000471	CF RES.	1/4W 10K J
	R607	VE-30000554	CF RES.	1/4W 180R J
	R608	VE-30000859	MF RES.	1/2W 1R F
	R609	VE-30000711	CF RES.	1/2W 470R J
	R610	VE-30000599	CF RES.	1/4W 220K J
	R611	VE-30012708	SMD RES.	1/16W 68K J
	R614	VE-30012509	SMD RES.	1/16W 100K J
	R616	VE-30012669	SMD RES.	1/16W 22K J
	R617	VE-30000572	CF RES.	1/4W 2K J
	R630	VE-30012702	SMD RES.	1/16W 560R J
	R634	VE-30000633	CF RES.	1/4W 27K J
	R639	VE-30000471	CF RES.	1/4W 10K J
	R640	VE-30000628	CF RES.	1/4W 2.7K J
	R646	VE-30000531	CF RES.	1/4W 15K J
	R647	VE-30000466	CF RES.	1/4W 1K J
⚠	R648	VE-30001246	FUSE RES.	1W 0.47R J
	R650	VE-30012702	SMD RES.	1/16W 560R J
	R651	VE-30012668	SMD RES.	1/16W 220R J
⚠	R656	VE-30001230	FUSE RES.	1/2W 27R J

[AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP]

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
⚠	R657	VE-30001228	FUSE RES.	1/2W 2.2R J
	R662	VE-30012674	SMD RES.	1/16W 27K J
	R666	VE-30000815	CF RES.	1/4W 8.2K J
	R668	VE-30000790	CF RES.	1/4W 6.8R J
	R669	VE-30012510	SMD RES.	1/16W 100R J
	R670	VE-30012510	SMD RES.	1/16W 100R J
	R674	VE-30012662	SMD RES.	1/16W 2.7K J
⚠	R675	VE-30001244	FUSE RES.	1/2W 0.47R J
	R677	VE-30001124	MO RES.	3W 220R J
	R678	VE-30014022	SMD RES.	1/16W 47R J
	R680	VE-30000477	CF RES.	1/4W 100K J
	R681	VE-30012509	SMD RES.	1/16W 100K J
	R682	VE-30008856	MO RES.	2W 270R J
	R683	VE-30017083	WW RES.	5W 2.2K J RAD.
	R689	VE-30000718	CF RES.	1/4W 4.7K J
	R690	VE-30000466	CF RES.	1/4W 1K J
	R691	VE-30012696	SMD RES.	1/16W 47K J
	R692	VE-30012509	SMD RES.	1/16W 100K J
	R693	VE-30012708	SMD RES.	1/16W 68K J
	R694	VE-30000689	CF RES.	1/4W 3.9K J
	R695	VE-30000471	CF RES.	1/4W 10K J
	R696-Y	VE-30001350	ZENER DIODE	12V
	R697	VE-30000712	CF RES.	1/4W 470R J
	R698	VE-30012657	SMD RES.	1/16W 1K J
	R699	VE-30012685	SMD RES.	1/16W 33K J
	R700	VE-30012649	SMD RES.	1/16W 150R J
	R701	VE-30000459	CF RES.	1/4W 100R J
	R703	VE-30000459	CF RES.	1/4W 100R J
	R705	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30012702	SMD RES.	1/16W 560R J
	R717	VE-30012702	SMD RES.	1/16W 560R J
	R719	VE-30012657	SMD RES.	1/16W 1K J
	R721	VE-30012510	SMD RES.	1/16W 100R J
	R722	VE-30012510	SMD RES.	1/16W 100R J
	R723	VE-30012510	SMD RES.	1/16W 100R J
	R724	VE-30012510	SMD RES.	1/16W 100R J
	R801	VE-30000718	CF RES.	1/4W 4.7K J
	R803	VE-30012659	SMD RES.	1/16W 2.2K J
	R805	VE-30000650	CF RES.	1/4W 33R J
	R806	VE-30000982	MF RES.	1/4W 4.7K J
	R807	VE-30001173	MO RES.	1W 0.47R J
	R809	VE-30007784	MO RES.	5W 33K J(RADIAL)
⚠	R810	VE-30001257	MG RES.	1/2W 4.7M J
	R811	VE-30000718	CF RES.	1/4W 4.7K J
	R812	VE-30012641	SMD RES.	1/16W 10K J
	R813	VE-30000466	CF RES.	1/4W 1K J
	R814	VE-30000466	CF RES.	1/4W 1K J
	R817	VE-30000880	MF RES.	1/4W 130K F
	R818	VE-30012675	SMD RES.	1/16W 2K J
	R819	VE-30000526	CF RES.	1/4W 1.5K J
	R828	VE-30000530	CF RES.	1/2W 15K J
	R829	VE-30000530	CF RES.	1/2W 15K J
	R834	VE-30001159	MO RES.	1W 0.33R J
	R836	VE-30012662	SMD RES.	1/16W 2.7K J
	R839	VE-30000526	CF RES.	1/4W 1.5K J
	R842	VE-30014128	SMD RES.	1/16W 33R J
	R844	VE-30012641	SMD RES.	1/16W 10K J
	R845	VE-30012509	SMD RES.	1/16W 100K J
	R846	VE-30012692	SMD RES.	1/16W 4.7K J
	R847	VE-30014128	SMD RES.	1/16W 33R J
	R848	VE-30012641	SMD RES.	1/16W 10K J
	R849	VE-30012510	SMD RES.	1/16W 100R J
	R851	VE-30000718	CF RES.	1/4W 4.7K J
	R852	VE-30000650	CF RES.	1/4W 33R J
	R853	VE-30012642	SMD RES.	1/16W 120K J
	R855	VE-30000459	CF RES.	1/4W 100R J
	R856	VE-30012694	SMD RES.	1/16W 470K J

CAPACITOR

Symbol No.	Part No.	Part Name	Description
C141	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
C142	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
C143	VE-30012589	SMD CAP.	4.7NF 50V K
C144	VE-30012589	SMD CAP.	4.7NF 50V K
C145	VE-30012589	SMD CAP.	4.7NF 50V K
C146	VE-30012589	SMD CAP.	4.7NF 50V K
C147	VE-30012589	SMD CAP.	4.7NF 50V K
C148	VE-30012589	SMD CAP.	4.7NF 50V K
C149	VE-30012589	SMD CAP.	4.7NF 50V K
C150	VE-30012589	SMD CAP.	4.7NF 50V K
C155	VE-30012560	SMD CAP.	100PF 50V J
C157	VE-30012560	SMD CAP.	100PF 50V J
C159	VE-30000352	EL CAP.	100UF 16V M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C160	VE-30000345	EL CAP.	10UF 50V M
	C161	VE-30000345	EL CAP.	10UF 50V M
	C162	VE-30012573	SMD CAP.	47PF 50V J
	C164	VE-30012692	SMD RES.	1/16W 4.7K J
	C165	VE-30000413	EL CAP.	4.7UF 50V M
	C201	VE-30000400	EL CAP.	47UF 50V M
	C205	VE-30000345	EL CAP.	10UF 50V M
	C206	VE-30012610	SMD CAP.	10NF 50V J
	C207	VE-30012610	SMD CAP.	10NF 50V J
	C230	VE-30016654	SMD CAP.	100NF 16V K R
	C246	VE-30000295	CER CAP.	100NF 50V Z F
	C303	VE-30000100	MKT CAP.	330NF 63V J
	C305	VE-30012590	SMD CAP.	47NF 50V K
	C310	VE-30000345	EL CAP.	10UF 50V M
	C333	VE-30000083	MKT CAP.	150NF 63V J
	C363	VE-30000083	MKT CAP.	150NF 63V J
	C364	VE-30012590	SMD CAP.	47NF 50V K
	C366	VE-30000407	EL CAP.	470UF 16V M
	C368	VE-30012590	SMD CAP.	47NF 50V K
	C404	VE-30000190	CER CAP.	100PF 50V J CH
	C408	VE-30012586	SMD CAP.	22NF 50V K
	C409	VE-30000345	EL CAP.	10UF 50V M
	C410	VE-30000384	EL CAP.	2.2UF 50V M
	C411	VE-30000345	EL CAP.	10UF 50V M
	C412	VE-30016654	SMD CAP.	100NF 16V K R
	C413	VE-30000362	EL CAP.	1UF 50V M
	C414	VE-30012585	SMD CAP.	2.2NF 50V K R
	C415	VE-30012581	SMD CAP.	1NF 50V K R
	C416	VE-30000362	EL CAP.	1UF 50V M
	C417	VE-30000362	EL CAP.	1UF 50V M
	C418	VE-30016654	SMD CAP.	100NF 16V K R
	C419	VE-30000384	EL CAP.	2.2UF 50V M
	C420	VE-30000100	MKT CAP.	330NF 63V J
	C422	VE-30000352	EL CAP.	100UF 16V M
	C423	VE-30000352	EL CAP.	100UF 16V M
	C424	VE-30000352	EL CAP.	100UF 16V M
	C425	VE-30016654	SMD CAP.	100NF 16V K R
	C427	VE-30016654	SMD CAP.	100NF 16V K R
	C429	VE-30012589	SMD CAP.	4.7NF 50V K
	C430	VE-30016654	SMD CAP.	100NF 16V K R
	C431	VE-30000362	EL CAP.	1UF 50V M
	C432	VE-30016654	SMD CAP.	100NF 16V K R
	C433	VE-30000345	EL CAP.	10UF 50V M
	C434	VE-30016654	SMD CAP.	100NF 16V K R
	C435	VE-30016654	SMD CAP.	100NF 16V K R
	C436	VE-30000384	EL CAP.	2.2UF 50V M
	C437	VE-30016654	SMD CAP.	100NF 16V K R
	C438	VE-30016654	SMD CAP.	100NF 16V K R
	C439	VE-30016654	SMD CAP.	100NF 16V K R
	C440	VE-30000295	CER CAP.	100NF 50V Z F
	C441	VE-30012582	SMD CAP.	10NF 50V K R
	C442	VE-30000362	EL CAP.	1UF 50V M
	C443	VE-30000362	EL CAP.	1UF 50V M
	C444	VE-30000384	EL CAP.	2.2UF 50V M
	C446	VE-30000345	EL CAP.	10UF 50V M
	C448	VE-30012586	SMD CAP.	22NF 50V K
	C449	VE-30012560	SMD CAP.	100PF 50V J
	C453	VE-30000352	EL CAP.	100UF 16V M
	C455	VE-30000345	EL CAP.	10UF 50V M
	C457	VE-30012560	SMD CAP.	100PF 50V J
	C459	VE-30012560	SMD CAP.	100PF 50V J
	C501	VE-30016654	SMD CAP.	100NF 16V K R
	C502	VE-30000400	EL CAP.	47UF 50V M
	C504	VE-30016654	SMD CAP.	100NF 16V K R
	C505	VE-30012589	SMD CAP.	4.7NF 50V K
	C507	VE-30000345	EL CAP.	10UF 50V M
	C510	VE-30016654	SMD CAP.	100NF 16V K R
	C511	VE-30012566	SMD CAP.	22PF 50V J
	C513	VE-30000345	EL CAP.	10UF 50V M
	C514	VE-30016654	SMD CAP.	100NF 16V K R
	C515	VE-30012560	SMD CAP.	100PF 50V J
	C517	VE-30016654	SMD CAP.	100NF 16V K R
	C518	VE-30016654	SMD CAP.	100NF 16V K R
	C519	VE-30012560	SMD CAP.	100PF 50V J
	C520	VE-30012560	SMD CAP.	100PF 50V J
	C521	VE-30012562	SMD CAP.	15PF 50V J
	C522	VE-30012562	SMD CAP.	15PF 50V J
	C523	VE-30012585	SMD CAP.	2.2NF 50V K R
	C524	VE-30012566	SMD CAP.	22PF 50V J
	C525	VE-30012566	SMD CAP.	22PF 50V J
	C526	VE-30016654	SMD CAP.	100NF 16V K R
	C527	VE-30000345	EL CAP.	10UF 50V M
	C529	VE-30012589	SMD CAP.	4.7NF 50V K
	C530	VE-30012589	SMD CAP.	4.7NF 50V K

[AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C532	VE-30016654	SMD CAP.	100NF 16V K R
	C536	VE-30000295	CER CAP.	100NF 50V Z F
	C541	VE-30000362	EL CAP.	1UF 50V M
	C542	VE-30000107	MKT CAP.	47NF 250V J
	C543	VE-30000431	CER CAP.	100PF 1KV M
	C544	VE-30000345	EL CAP.	10UF 50V M
	C547	VE-30000345	EL CAP.	10UF 50V M
	C565	VE-30016654	SMD CAP.	100NF 16V K R
	C566	VE-30016654	SMD CAP.	100NF 16V K R
	C567	VE-30000431	CER CAP.	100PF 1KV M
	C602	VE-30017319	MKT CAP.	120NF 63V J
	C604	VE-30000356	EL CAP.	100UF 63V M
	C605	VE-30000360	EL CAP.	1000UF 25V M
	C607	VE-30012581	SMD CAP.	1NF 50V K R
⚠	C618	VE-30000159	MKP CAP.	4.7NF 1.6KV J
⚠	C621	VE-30000179	MKP CAP.	9.1NF 1600V ϕ3.5
	C622	VE-30000121	KP CAP.	27NF 630V J
⚠	C625	VE-30000156	MKP CAP.	430NF 250V J
	C627	VE-30000167	MKP CAP.	560NF 250V J
	C629	VE-30000177	MKP CAP.	820NF 250V J
	C632	VE-30000100	MKT CAP.	330NF 63V J
	C635	VE-30000385	EL CAP.	2.2UF 250V M
	C636	VE-30000387	EL CAP.	33UF 50V M
	C640	VE-30000100	MKT CAP.	330NF 63V J
	C641	VE-30000090	MKT CAP.	22NF 100V J
	C642	VE-30000407	EL CAP.	470UF 16V M
	C644	VE-30000409	EL CAP.	470UF 25V M
	C645	VE-30000090	MKT CAP.	22NF 100V J
	C646	VE-30000100	MKT CAP.	330NF 63V J
	C647	VE-30007748	EL CAP.	1000UF 35V M
	C648	VE-30000394	EL CAP.	3.3UF 160V M
	C649	VE-30000295	CER CAP.	100NF 50V Z F
	C652	VE-30000330	CER CAP.	4.7NF 50V K B
	C653	VE-30000107	MKT CAP.	47NF 250V J
	C655	VE-30000415	EL CAP.	4.7UF 250V M
	C700	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C701	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C702	VE-30012576	SMD CAP.	56PF 50V J CH
	C703	VE-30012576	SMD CAP.	56PF 50V J CH
	C704	VE-30012576	SMD CAP.	56PF 50V J CH
	C705	VE-30000345	EL CAP.	10UF 50V M
	C706	VE-30000345	EL CAP.	10UF 50V M
	C708	VE-30016654	SMD CAP.	100NF 16V K R
	C712	VE-30000345	EL CAP.	10UF 50V M
	C713	VE-30016654	SMD CAP.	100NF 16V K R
	C714	VE-30000100	MKT CAP.	330NF 63V J
	C716	VE-30000100	MKT CAP.	330NF 63V J
	C717	VE-30000100	MKT CAP.	330NF 63V J
	C718	VE-30000100	MKT CAP.	330NF 63V J
	C719	VE-30016654	SMD CAP.	100NF 16V K R
	C720	VE-30000345	EL CAP.	10UF 50V M
	C721	VE-30000100	MKT CAP.	330NF 63V J
	C723	VE-30000100	MKT CAP.	330NF 63V J
	C724	VE-30000345	EL CAP.	10UF 50V M
	C729	VE-30016654	SMD CAP.	100NF 16V K R
	C730	VE-30000393	EL CAP.	3.3UF 50V M
	C733	VE-30000345	EL CAP.	10UF 50V M
	C734	VE-30000345	EL CAP.	10UF 50V M
	C735	VE-30016654	SMD CAP.	100NF 16V K R
	C736	VE-30000345	EL CAP.	10UF 50V M
	C737	VE-30000384	EL CAP.	2.2UF 50V M
	C738	VE-30000384	EL CAP.	2.2UF 50V M
	C739	VE-30000384	EL CAP.	2.2UF 50V M
	C740	VE-30000384	EL CAP.	2.2UF 50V M
	C741	VE-30012589	SMD CAP.	4.7NF 50V K
	C742	VE-30012589	SMD CAP.	4.7NF 50V K
	C745	VE-30016654	SMD CAP.	100NF 16V K R
⚠	C801	VE-30000094	MKT CAP.	220NF 275V MAC
⚠	C802	VE-30000094	MKT CAP.	220NF 275V MAC
⚠	C803	VE-30000433	CER CAP.	1NF 1KV M B
⚠	C804	VE-30000433	CER CAP.	1NF 1KV M B
	C808	VE-30012590	SMD CAP.	47NF 50V K
	C809	VE-30000420	EL CAP.	150UF 400V M
	C810	VE-30000387	EL CAP.	33UF 50V M
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C812	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
⚠	C816	VE-30000440	CER CAP.	2.2NF 4KV M
	C817	VE-30000198	CER CAP.	120PF 500V J SL
	C818	VE-30012590	SMD CAP.	47NF 50V K
	C819	VE-30012590	SMD CAP.	47NF 50V K
	C822	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C826	VE-30000406	EL CAP.	47UF 250V M (HR)
	C827	VE-30000411	EL CAP.	4700UF 16V M
	C828	VE-30012590	SMD CAP.	47NF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C829	VE-30000407	EL CAP.	470UF 16V M
	C830	VE-30000383	EL CAP.	2200UF 25V M
	C832	VE-30012590	SMD CAP.	47NF 50V K
	C833	VE-30000407	EL CAP.	470UF 16V M
	C834	VE-30012590	SMD CAP.	47NF 50V K
	C835	VE-30012590	SMD CAP.	47NF 50V K
	C838	VE-30000407	EL CAP.	470UF 16V M
	C839	VE-30000407	EL CAP.	470UF 16V M
	C840	VE-30000407	EL CAP.	470UF 16V M
	C848	VE-30000407	EL CAP.	470UF 16V M
	C850	VE-30000383	EL CAP.	2200UF 25V M
	C851	VE-30012590	SMD CAP.	47NF 50V K
⚠	C852	VE-30000440	CER CAP.	2.2NF 4KV M
	C857	VE-30000106	MKT CAP.	47NF 100V J
	C858	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	C859	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C860	VE-30000296	CER CAP.	100NF 100V Z F
	C872	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	TRANSF			
	TR600	VE-30002090	LINE DRIVER	
⚠	TR601	VE-30017522	FBT TRF	
⚠	TR802	VE-30018785	SMPS TRF	
	COIL			
	L101	VE-30001971	FERRITE BEAT	
	L102	VE-30001971	FERRITE BEAT	
	L106	VE-30001971	FERRITE BEAT	
	L108	VE-30001971	FERRITE BEAT	
	L109	VE-30001971	FERRITE BEAT	
	L110	VE-30001971	FERRITE BEAT	
	L111	VE-30001971	FERRITE BEAT	
	L112	VE-30001971	FERRITE BEAT	
	L113	VE-30001971	FERRITE BEAT	
	L114	VE-30001971	FERRITE BEAT	
	L115	VE-30001971	FERRITE BEAT	
	L116	VE-30001971	FERRITE BEAT	
	L117	VE-30001971	FERRITE BEAT	
	L201	VE-30001979	FIXED COIL	1UH
	L210	VE-30001971	FERRITE BEAT	
	L215	VE-30001971	FERRITE BEAT	
	L401	VE-30001971	FERRITE BEAT	
	L402	VE-30001992	FIXED COIL	10UH
	L403	VE-30001971	FERRITE BEAT	
	L404	VE-30001990	FIXED COIL	6.8UH
	L405	VE-30014048	ADJ. COIL	44MHZ
	L406	VE-30001971	FERRITE BEAT	
	L407	VE-30001992	FIXED COIL	10UH
	L408	VE-30001992	FIXED COIL	10UH
	L501	VE-30001971	FERRITE BEAT	
	L502	VE-30001971	FERRITE BEAT	
	L503	VE-30001971	FERRITE BEAT	
	L504	VE-30001971	FERRITE BEAT	
	L600	VE-30002031	FIXED COIL	15MH
	L602	VE-30002156	LINEARITY COIL	30UH
	L603	VE-30002026	FIXED COIL	1MH
	L700	VE-30001971	FERRITE BEAT	
	L701	VE-30001971	FERRITE BEAT	
	L702	VE-30001992	FIXED COIL	10UH
	L703	VE-30001971	FERRITE BEAT	
	L704	VE-30001971	FERRITE BEAT	
	L801	VE-30002011	CHOKE COIL	150UH
	L803	VE-30001992	FIXED COIL	10UH
	DIODE			
	D105	VE-30007760	ZENER DIODE	
	D106	VE-30007760	ZENER DIODE	
	D107	VE-30007760	ZENER DIODE	
	D303	VE-30001329	DIODE	
	D402	VE-30012411	DIODE	
	D405	VE-30007763	ZENER DIODE	
	D407	VE-30001284	DIODE	
	D408	VE-30001285	DIODE	
	D409	VE-30001284	DIODE	
	D413	VE-30018526	ZENER DIODE	
	D501	VE-30001285	DIODE	
	D505	VE-30001285	DIODE	
	D506	VE-30001284	DIODE	

[AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP]

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D512	VE-30001285	DIODE	
	D513	VE-30001369	ZENER DIODE	
	D533	VE-30001377	ZENER DIODE	
	D601	VE-30001329	DIODE	
	D603	VE-30001285	DIODE	
	D605	VE-30001320	DIODE	
	D606	VE-30001323	DIODE	
	D609	VE-30001318	DIODE	
	D610	VE-30001318	DIODE	
	D613	VE-30001318	DIODE	
	D614	VE-30001285	DIODE	
	D616	VE-30003696	DIODE	
	D617	VE-30001318	DIODE	
	D651	VE-30001285	DIODE	
	D653	VE-30001285	DIODE	
	D656	VE-30007763	ZENER DIODE	
	D657	VE-30007763	ZENER DIODE	
	D658	VE-30007763	ZENER DIODE	
	D659	VE-30001350	ZENER DIODE	
	D660	VE-30001347	ZENER DIODE	
	D661	VE-30001350	ZENER DIODE	
	D700	VE-30001285	DIODE	
	D701	VE-30001369	ZENER DIODE	
	D800	VE-30001318	DIODE	
	D801	VE-30001372	ZENER DIODE	
	D802	VE-30001318	DIODE	
	D803	VE-30001315	DIODE	
	D804	VE-30001318	DIODE	
	D805	VE-30001315	DIODE	
	D806	VE-30001315	DIODE	
	D808	VE-20092405	CN.ASY	
	D809	VE-30001329	DIODE	
	D810	VE-30009366	DIODE	
	D811	VE-30009366	DIODE	
	D812	VE-30001285	DIODE	
	D889	VE-30001384	TR	
⚠	D891	VE-30007758	BRIDGE DIODE	
	D892	VE-30001318	DIODE	
	D893	VE-30001318	DIODE	
	D894	VE-30001285	DIODE	
	D897	VE-30001329	DIODE	

TRANSISTOR

	Q104	VE-30001457	TR	
	Q106	VE-30001457	TR	
	Q141	VE-30001457	TR	
	Q142	VE-30001457	TR	
	Q307	VE-30001457	TR	
	Q316	VE-30001458	TR	
	Q402	VE-30001457	TR	
	Q403	VE-30001457	TR	
	Q404	VE-30001457	TR	
	Q503	VE-30001457	TR	
	Q504	VE-30001458	TR	
	Q600	VE-30001435	TR	
⚠	Q601	VE-30001441	TR	
	Q602	VE-30001429	TR	
	Q603	VE-30001458	TR	
	Q604	VE-30001457	TR	
	Q605	VE-30001458	TR	
	Q700	VE-30001458	TR	
	Q801	VE-30001386	TR	
	Q802	VE-30001457	TR	
	Q804	VE-30001454	TR	

IC

	IC301	VE-30016113	IC	
	IC403	VE-30014510	IC	
	IC500	VE-20099534	IC	(SERVICE)
	IC501	VE-20093395	IC	(MICOM)
	IC601	VE-30013985	IC	
	IC700	VE-30013658	IC	
	IC800	VE-30011968	IC	
⚠	IC801	VE-30015087	IC	
	IC802	VE-30001622	IC	
	IC803	VE-30001500	IC	
	IC804	VE-30001622	IC	
	IC818	VE-30001506	IC	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
⚠	TR801	VE-30002104	LINE FILTER	
⚠	F801	VE-30001731	FUSE	2.5A
⚠	TH800	VE-30001270	PTC	9 OHM
	TU201	VE-30009637	TUNER	
	VR800	VE-30001064	RES ADJ	
	X401	VE-30001749	XTAL	
	X402	VE-30015592	XTAL	
	X501	VE-30002851	XTAL	
	X700	VE-30001756	XTAL	
	Z401	VE-30012545	SAW FILTER	
	Z402	VE-30014261	SAW FILTER	
	Z404	VE-30001724	SER FILTER	

CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

PRINTED WIRING BOARD PARTS LIST

[AV-28BT8EES / AV-28BT8EEB]

MAIN P.W. BOARD ASS'Y (VE-20101622)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R102	VE-30012657	SMD RES.	1/16W 1K J
	R103	VE-30012657	SMD RES.	1/16W 1K J
	R106	VE-30012713	SMD RES.	1/16W 75R J
	R107	VE-30012649	SMD RES.	1/16W 150R J
	R109	VE-30012713	SMD RES.	1/16W 75R J
	R110	VE-30012713	SMD RES.	1/16W 75R J
	R111	VE-30012649	SMD RES.	1/16W 150R J
	R113	VE-30012713	SMD RES.	1/16W 75R J
	R114	VE-30012713	SMD RES.	1/16W 75R J
	R115	VE-30012713	SMD RES.	1/16W 75R J
	R117	VE-30000792	CF RES.	1/4W 75R J
	R118	VE-30012713	SMD RES.	1/16W 75R J
	R121	VE-30012649	SMD RES.	1/16W 150R J
	R122	VE-30000792	CF RES.	1/4W 75R J
	R123	VE-30000792	CF RES.	1/4W 75R J
	R124	VE-30012649	SMD RES.	1/16W 150R J
	R126	VE-30012657	SMD RES.	1/16W 1K J
	R129	VE-30012713	SMD RES.	1/16W 75R J
	R135	VE-30012657	SMD RES.	1/16W 1K J
	R137	VE-30000466	CF RES.	1/4W 1K J
	R138	VE-30012657	SMD RES.	1/16W 1K J
	R139	VE-30012713	SMD RES.	1/16W 75R J
	R141	VE-30012657	SMD RES.	1/16W 1K J
	R145	VE-30012713	SMD RES.	1/16W 75R J
	R149	VE-30012703	SMD RES.	1/16W 56K J
	R151	VE-30012696	SMD RES.	1/16W 47K J
	R152	VE-30000752	CF RES.	1/4W 56K J
	R153	VE-30012657	SMD RES.	1/16W 1K J
	R154	VE-30000723	CF RES.	1/4W 47K J
	R155	VE-30012649	SMD RES.	1/16W 150R J
	R169	VE-30012703	SMD RES.	1/16W 56K J
	R171	VE-30012713	SMD RES.	1/16W 75R J
	R172	VE-30012692	SMD RES.	1/16W 4.7K J
	R174	VE-30012713	SMD RES.	1/16W 75R J
	R175	VE-30012713	SMD RES.	1/16W 75R J
	R176	VE-30012703	SMD RES.	1/16W 56K J
	R201	VE-30012674	SMD RES.	1/16W 27K J
	R202	VE-30012692	SMD RES.	1/16W 4.7K J
	R204	VE-30000459	CF RES.	1/4W 100R J
	R206	VE-30000459	CF RES.	1/4W 100R J
	R319	VE-30014076	SMD RES.	1/16W 4.7R J
	R320	VE-30014076	SMD RES.	1/16W 4.7R J
	R324	VE-30012667	SMD RES.	1/16W 220K J
	R328	VE-30012649	SMD RES.	1/16W 150R J
	R329	VE-30012692	SMD RES.	1/16W 4.7K J
	R332	VE-30012641	SMD RES.	1/16W 10K J
	R333	VE-30012702	SMD RES.	1/16W 560R J
	R338	VE-30012641	SMD RES.	1/16W 10K J
	R340	VE-30012644	SMD RES.	1/16W 12K J
	R341	VE-30012702	SMD RES.	1/16W 560R J
	R343	VE-30012659	SMD RES.	1/16W 2.2K J
	R370	VE-30012669	SMD RES.	1/16W 22K J
	R371	VE-30012669	SMD RES.	1/16W 22K J
	R391	VE-30012696	SMD RES.	1/16W 47K J
	R417	VE-30012510	SMD RES.	1/16W 100R J
	R418	VE-30012510	SMD RES.	1/16W 100R J
	R419	VE-30012649	SMD RES.	1/16W 150R J
	R420	VE-30000466	CF RES.	1/4W 1K J
	R421	VE-30012650	SMD RES.	1/16W 15K J
	R422	VE-30012659	SMD RES.	1/16W 2.2K J
	R423	VE-30012712	SMD RES.	1/16W 8.2K J
	R425	VE-30012510	SMD RES.	1/16W 100R J
	R426	VE-30012659	SMD RES.	1/16W 2.2K J
	R427	VE-30012674	SMD RES.	1/16W 27K J
	R428	VE-30012510	SMD RES.	1/16W 100R J
	R430	VE-30012702	SMD RES.	1/16W 560R J
	R431	VE-30012674	SMD RES.	1/16W 27K J
	R432	VE-30012707	SMD RES.	1/16W 680R J
	R433	VE-30012683	SMD RES.	1/16W 330K J
	R437	VE-30000466	CF RES.	1/4W 1K J
	R438	VE-30000466	CF RES.	1/4W 1K J
	R439	VE-30012657	SMD RES.	1/16W 1K J
	R440	VE-30012714	SMD RES.	1/16W 820R J
	R441	VE-30012674	SMD RES.	1/16W 27K J
	R442	VE-30000466	CF RES.	1/4W 1K J
	R446	VE-30012714	SMD RES.	1/16W 820R J
	R447	VE-30012714	SMD RES.	1/16W 820R J
	R448	VE-30012683	SMD RES.	1/16W 330K J
	R449	VE-30012659	SMD RES.	1/16W 2.2K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R450	VE-30012702	SMD RES.	1/16W 560R J
	R458	VE-30012510	SMD RES.	1/16W 100R J
	R459	VE-30012668	SMD RES.	1/16W 220R J
	R460	VE-30012668	SMD RES.	1/16W 220R J
	R461	VE-30012668	SMD RES.	1/16W 220R J
	R462	VE-30012510	SMD RES.	1/16W 100R J
	R467	VE-30000670	CF RES.	1/4W 330K J
	R468	VE-30000670	CF RES.	1/4W 330K J
	R469	VE-30000628	CF RES.	1/4W 2.7K J
	R471	VE-30014022	SMD RES.	1/16W 47R J
	R472	VE-30012662	SMD RES.	1/16W 2.7K J
	R474	VE-30012662	SMD RES.	1/16W 2.7K J
	R481	VE-30000466	CF RES.	1/4W 1K J
	R482	VE-30012657	SMD RES.	1/16W 1K J
	R483	VE-30012657	SMD RES.	1/16W 1K J
	R485	VE-30012657	SMD RES.	1/16W 1K J
	R486	VE-30012657	SMD RES.	1/16W 1K J
	R487	VE-30012657	SMD RES.	1/16W 1K J
	R507	VE-30000466	CF RES.	1/4W 1K J
	R508	VE-30012510	SMD RES.	1/16W 100R J
	R509	VE-30012641	SMD RES.	1/16W 10K J
	R510	VE-30012702	SMD RES.	1/16W 560R J
	R511	VE-30012657	SMD RES.	1/16W 1K J
	R512	VE-30000495	CF RES.	1/4W 1.2K J
	R513	VE-30000459	CF RES.	1/4W 100R J
	R514	VE-30000459	CF RES.	1/4W 100R J
	R515	VE-30012659	SMD RES.	1/16W 2.2K J
	R516	VE-30012659	SMD RES.	1/16W 2.2K J
	R517	VE-30012692	SMD RES.	1/16W 4.7K J
	R518	VE-30000471	CF RES.	1/4W 10K J
	R519	VE-30012698	SMD RES.	1/16W 5.6K J
	R525	VE-30012649	SMD RES.	1/16W 150R J
	R526	VE-30012641	SMD RES.	1/16W 10K J
	R527	VE-30012692	SMD RES.	1/16W 4.7K J
	R528	VE-30012698	SMD RES.	1/16W 5.6K J
	R529	VE-30012698	SMD RES.	1/16W 5.6K J
	R530	VE-30012698	SMD RES.	1/16W 5.6K J
	R532	VE-30012659	SMD RES.	1/16W 2.2K J
	R533	VE-30012644	SMD RES.	1/16W 12K J
	R534	VE-30000628	CF RES.	1/4W 2.7K J
	R537	VE-30012641	SMD RES.	1/16W 10K J
	R538	VE-30012698	SMD RES.	1/16W 5.6K J
	R539	VE-30012659	SMD RES.	1/16W 2.2K J
	R540	VE-30012644	SMD RES.	1/16W 12K J
	R545	VE-30012644	SMD RES.	1/16W 12K J
	R548	VE-30012641	SMD RES.	1/16W 10K J
	R554	VE-30012641	SMD RES.	1/16W 10K J
	R555	VE-30012659	SMD RES.	1/16W 2.2K J
	R556	VE-30012657	SMD RES.	1/16W 1K J
	R560	VE-30012674	SMD RES.	1/16W 27K J
	R561	VE-30012692	SMD RES.	1/16W 4.7K J
	R568	VE-30000594	CF RES.	1/4W 22K J
	R572	VE-30012659	SMD RES.	1/16W 2.2K J
	R573	VE-30012641	SMD RES.	1/16W 10K J
	R574	VE-30012657	SMD RES.	1/16W 1K J
	R603	VE-30000459	CF RES.	1/4W 100R J
	R604	VE-30012510	SMD RES.	1/16W 100R J
	R606	VE-30000471	CF RES.	1/4W 10K J
	R607	VE-30000554	CF RES.	1/4W 180R J
	R608	VE-30000859	MF RES.	1/2W 1R F
	R609	VE-30000711	CF RES.	1/2W 470R J
	R610	VE-30000599	CF RES.	1/4W 220K J
	R611	VE-30012708	SMD RES.	1/16W 68K J
	R614	VE-30012509	SMD RES.	1/16W 100K J
	R616	VE-30012669	SMD RES.	1/16W 22K J
	R617	VE-30000572	CF RES.	1/4W 2K J
	R630	VE-30012702	SMD RES.	1/16W 560R J
	R634	VE-30000633	CF RES.	1/4W 27K J
	R639	VE-30000471	CF RES.	1/4W 10K J
	R640	VE-30000628	CF RES.	1/4W 2.7K J
	R646	VE-30000531	CF RES.	1/4W 15K J
	R647	VE-30000466	CF RES.	1/4W 1K J
⚠	R648	VE-30001246	FUSE RES.	1W 0.47R J
	R650	VE-30012702	SMD RES.	1/16W 560R J
	R651	VE-30012668	SMD RES.	1/16W 220R J
⚠	R656	VE-30001230	FUSE RES.	1/2W 27R J
⚠	R657	VE-30001228	FUSE RES.	1/2W 2.2R J
	R662	VE-30012674	SMD RES.	1/16W 27K J
	R666	VE-30000815	CF RES.	1/4W 8.2K J

[AV-28BT8EES / AV-28BT8EEB]

⚠	Symbol No.	Part No.	Part Name	Description
		RESISTOR		
	R668	VE-30000790	CF RES.	1/4W 6.8R J
	R669	VE-30012510	SMD RES.	1/16W 100R J
	R670	VE-30012510	SMD RES.	1/16W 100R J
	R674	VE-30012662	SMD RES.	1/16W 2.7K J
⚠	R675	VE-30001244	FUSE RES.	1/2W 0.47R J
	R677	VE-30001124	MO RES.	3W 220R J
	R678	VE-30014022	SMD RES.	1/16W 47R J
	R680	VE-30000477	CF RES.	1/4W 100K J
	R681	VE-30012509	SMD RES.	1/16W 100K J
	R682	VE-30008856	MO RES.	2W 270R J
	R683	VE-30017083	WW RES.	5W 2.2K J RAD.
	R689	VE-30000718	CF RES.	1/4W 4.7K J
	R690	VE-30000466	CF RES.	1/4W 1K J
	R691	VE-30012696	SMD RES.	1/16W 47K J
	R692	VE-30012509	SMD RES.	1/16W 100K J
	R693	VE-30012708	SMD RES.	1/16W 68K J
	R694	VE-30000689	CF RES.	1/4W 3.9K J
	R695	VE-30000471	CF RES.	1/4W 10K J
	R696-Y	VE-30001350	ZENER DIODE	12V
	R697	VE-30000712	CF RES.	1/4W 470R J
	R698	VE-30012657	SMD RES.	1/16W 1K J
	R699	VE-30012685	SMD RES.	1/16W 33K J
	R700	VE-30012649	SMD RES.	1/16W 150R J
	R701	VE-30000459	CF RES.	1/4W 100R J
	R703	VE-30000459	CF RES.	1/4W 100R J
	R705	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30012702	SMD RES.	1/16W 560R J
	R717	VE-30012702	SMD RES.	1/16W 560R J
	R719	VE-30012657	SMD RES.	1/16W 1K J
	R721	VE-30012510	SMD RES.	1/16W 100R J
	R722	VE-30012510	SMD RES.	1/16W 100R J
	R723	VE-30012510	SMD RES.	1/16W 100R J
	R724	VE-30012510	SMD RES.	1/16W 100R J
	R801	VE-30000718	CF RES.	1/4W 4.7K J
	R803	VE-30012659	SMD RES.	1/16W 2.2K J
	R805	VE-30000650	CF RES.	1/4W 33R J
	R806	VE-30000982	MF RES.	1/4W 4.7K J
	R807	VE-30001173	MO RES.	1W 0.47R J
	R809	VE-30007784	MO RES.	5W 33K J(RADIAL)
⚠	R810	VE-30001257	MG RES.	1/2W 4.7M J
	R811	VE-30000718	CF RES.	1/4W 4.7K J
	R812	VE-30012641	SMD RES.	1/16W 10K J
	R813	VE-30000466	CF RES.	1/4W 1K J
	R814	VE-30000466	CF RES.	1/4W 1K J
	R817	VE-30000880	MF RES.	1/4W 130K F
	R818	VE-30012675	SMD RES.	1/16W 2K J
	R819	VE-30000526	CF RES.	1/4W 1.5K J
	R828	VE-30000530	CF RES.	1/2W 15K J
	R829	VE-30000530	CF RES.	1/2W 15K J
	R834	VE-30001159	MO RES.	1W 0.33R J
	R836	VE-30012662	SMD RES.	1/16W 2.7K J
	R839	VE-30000526	CF RES.	1/4W 1.5K J
	R842	VE-30014128	SMD RES.	1/16W 33R J
	R844	VE-30012641	SMD RES.	1/16W 10K J
	R845	VE-30012509	SMD RES.	1/16W 100K J
	R846	VE-30012692	SMD RES.	1/16W 4.7K J
	R847	VE-30014128	SMD RES.	1/16W 33R J
	R848	VE-30012641	SMD RES.	1/16W 10K J
	R849	VE-30012510	SMD RES.	1/16W 100R J
	R851	VE-30000718	CF RES.	1/4W 4.7K J
	R852	VE-30000650	CF RES.	1/4W 33R J
	R853	VE-30012642	SMD RES.	1/16W 120K J
	R855	VE-30000459	CF RES.	1/4W 100R J
	R856	VE-30012694	SMD RES.	1/16W 470K J
		CAPACITOR		
	C141	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
	C142	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
	C143	VE-30012589	SMD CAP.	4.7NF 50V K
	C144	VE-30012589	SMD CAP.	4.7NF 50V K
	C145	VE-30012589	SMD CAP.	4.7NF 50V K
	C146	VE-30012589	SMD CAP.	4.7NF 50V K
	C147	VE-30012589	SMD CAP.	4.7NF 50V K
	C148	VE-30012589	SMD CAP.	4.7NF 50V K
	C149	VE-30012589	SMD CAP.	4.7NF 50V K
	C150	VE-30012589	SMD CAP.	4.7NF 50V K
	C155	VE-30012560	SMD CAP.	100PF 50V J
	C157	VE-30012560	SMD CAP.	100PF 50V J
	C159	VE-30000352	EL CAP.	100UF 16V M
	C160	VE-30000345	EL CAP.	10UF 50V M
	C161	VE-30000345	EL CAP.	10UF 50V M

⚠	Symbol No.	Part No.	Part Name	Description
		CAPACITOR		
	C162	VE-30012573	SMD CAP.	47PF 50V J
	C164	VE-30012692	SMD RES.	1/16W 4.7K J
	C165	VE-30000413	EL CAP.	4.7UF 50V M
	C201	VE-30000400	EL CAP.	47UF 50V M
	C205	VE-30000345	EL CAP.	10UF 50V M
	C206	VE-30012610	SMD CAP.	10NF 50V J
	C207	VE-30012610	SMD CAP.	10NF 50V J
	C230	VE-30016654	SMD CAP.	100NF 16V K R
	C246	VE-30000295	CER CAP.	100NF 50V Z F
	C303	VE-30000100	MKT CAP.	330NF 63V J
	C305	VE-30012590	SMD CAP.	47NF 50V K
	C310	VE-30000345	EL CAP.	10UF 50V M
	C333	VE-30000083	MKT CAP.	150NF 63V J
	C363	VE-30000083	MKT CAP.	150NF 63V J
	C364	VE-30012590	SMD CAP.	47NF 50V K
	C366	VE-30000407	EL CAP.	470UF 16V M
	C368	VE-30012590	SMD CAP.	47NF 50V K
	C404	VE-30000190	CER CAP.	100PF 50V J CH
	C408	VE-30012586	SMD CAP.	22NF 50V K
	C409	VE-30000345	EL CAP.	10UF 50V M
	C410	VE-30000384	EL CAP.	2.2UF 50V M
	C411	VE-30000345	EL CAP.	10UF 50V M
	C412	VE-30016654	SMD CAP.	100NF 16V K R
	C413	VE-30000362	EL CAP.	1UF 50V M
	C414	VE-30012585	SMD CAP.	2.2NF 50V K R
	C415	VE-30012581	SMD CAP.	1NF 50V K R
	C416	VE-30000362	EL CAP.	1UF 50V M
	C417	VE-30000362	EL CAP.	1UF 50V M
	C418	VE-30016654	SMD CAP.	100NF 16V K R
	C419	VE-30000384	EL CAP.	2.2UF 50V M
	C420	VE-30000100	MKT CAP.	330NF 63V J
	C422	VE-30000352	EL CAP.	100UF 16V M
	C423	VE-30000352	EL CAP.	100UF 16V M
	C424	VE-30000352	EL CAP.	100UF 16V M
	C425	VE-30016654	SMD CAP.	100NF 16V K R
	C427	VE-30016654	SMD CAP.	100NF 16V K R
	C429	VE-30012589	SMD CAP.	4.7NF 50V K
	C430	VE-30016654	SMD CAP.	100NF 16V K R
	C431	VE-30000362	EL CAP.	1UF 50V M
	C432	VE-30016654	SMD CAP.	100NF 16V K R
	C433	VE-30000345	EL CAP.	10UF 50V M
	C434	VE-30016654	SMD CAP.	100NF 16V K R
	C435	VE-30016654	SMD CAP.	100NF 16V K R
	C436	VE-30000384	EL CAP.	2.2UF 50V M
	C437	VE-30016654	SMD CAP.	100NF 16V K R
	C438	VE-30016654	SMD CAP.	100NF 16V K R
	C439	VE-30016654	SMD CAP.	100NF 16V K R
	C440	VE-30000295	CER CAP.	100NF 50V Z F
	C441	VE-30012582	SMD CAP.	10NF 50V K R
	C442	VE-30000362	EL CAP.	1UF 50V M
	C443	VE-30000362	EL CAP.	1UF 50V M
	C444	VE-30000384	EL CAP.	2.2UF 50V M
	C448	VE-30012586	SMD CAP.	22NF 50V K
	C449	VE-30012560	SMD CAP.	100PF 50V J
	C453	VE-30000352	EL CAP.	100UF 16V M
	C455	VE-30000345	EL CAP.	10UF 50V M
	C459	VE-30012560	SMD CAP.	100PF 50V J
	C501	VE-30016654	SMD CAP.	100NF 16V K R
	C502	VE-30000400	EL CAP.	47UF 50V M
	C504	VE-30016654	SMD CAP.	100NF 16V K R
	C505	VE-30012589	SMD CAP.	4.7NF 50V K
	C507	VE-30000345	EL CAP.	10UF 50V M
	C510	VE-30016654	SMD CAP.	100NF 16V K R
	C511	VE-30012566	SMD CAP.	22PF 50V J
	C513	VE-30000345	EL CAP.	10UF 50V M
	C514	VE-30016654	SMD CAP.	100NF 16V K R
	C515	VE-30012560	SMD CAP.	100PF 50V J
	C517	VE-30016654	SMD CAP.	100NF 16V K R
	C518	VE-30016654	SMD CAP.	100NF 16V K R
	C519	VE-30012560	SMD CAP.	100PF 50V J
	C520	VE-30012560	SMD CAP.	100PF 50V J
	C521	VE-30012562	SMD CAP.	15PF 50V J
	C522	VE-30012562	SMD CAP.	15PF 50V J
	C523	VE-30012585	SMD CAP.	2.2NF 50V K R
	C524	VE-30012566	SMD CAP.	22PF 50V J
	C525	VE-30012566	SMD CAP.	22PF 50V J
	C526	VE-30016654	SMD CAP.	100NF 16V K R
	C527	VE-30000345	EL CAP.	10UF 50V M
	C529	VE-30012589	SMD CAP.	4.7NF 50V K
	C530	VE-30012589	SMD CAP.	4.7NF 50V K
	C532	VE-30016654	SMD CAP.	100NF 16V K R
	C536	VE-30000295	CER CAP.	100NF 50V Z F
	C541	VE-30000362	EL CAP.	1UF 50V M

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⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C542	VE-30000107	MKT CAP.	47NF 250V J
	C543	VE-30000431	CER CAP.	100PF 1KV M
	C544	VE-30000345	EL CAP.	10UF 50V M
	C547	VE-30000345	EL CAP.	10UF 50V M
	C565	VE-30016654	SMD CAP.	100NF 16V K R
	C566	VE-30016654	SMD CAP.	100NF 16V K R
	C567	VE-30000431	CER CAP.	100PF 1KV M
	C602	VE-30017319	MKT CAP.	120NF 63V J
	C604	VE-30000356	EL CAP.	100UF 63V M
	C605	VE-30000360	EL CAP.	1000UF 25V M
	C607	VE-30012581	SMD CAP.	1NF 50V K R
⚠	C618	VE-30000159	MKP CAP.	4.7NF 1.6KV J
⚠	C621	VE-30000179	MKP CAP.	9.1NF 1600V 933.5
	C622	VE-30000121	KP CAP.	27NF 630V J
⚠	C625	VE-30000156	MKP CAP.	430NF 250V J
	C627	VE-30000167	MKP CAP.	560NF 250V J
	C629	VE-30000177	MKP CAP.	820NF 250V J
	C632	VE-30000100	MKT CAP.	330NF 63V J
	C635	VE-30000385	EL CAP.	2.2UF 250V M
	C636	VE-30000387	EL CAP.	33UF 50V M
	C640	VE-30000100	MKT CAP.	330NF 63V J
	C641	VE-30000090	MKT CAP.	22NF 100V J
	C642	VE-30000407	EL CAP.	470UF 16V M
	C644	VE-30000409	EL CAP.	470UF 25V M
	C645	VE-30000090	MKT CAP.	22NF 100V J
	C646	VE-30000100	MKT CAP.	330NF 63V J
	C647	VE-30007748	EL CAP.	1000UF 35V M
	C648	VE-30000394	EL CAP.	3.3UF 160V M
	C649	VE-30000295	CER CAP.	100NF 50V Z F
	C652	VE-30000330	CER CAP.	4.7NF 50V K B
	C653	VE-30000107	MKT CAP.	47NF 250V J
	C655	VE-30000415	EL CAP.	4.7UF 250V M
	C700	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C701	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C702	VE-30012576	SMD CAP.	56PF 50V J CH
	C703	VE-30012576	SMD CAP.	56PF 50V J CH
	C704	VE-30012576	SMD CAP.	56PF 50V J CH
	C705	VE-30000345	EL CAP.	10UF 50V M
	C706	VE-30000345	EL CAP.	10UF 50V M
	C708	VE-30016654	SMD CAP.	100NF 16V K R
	C712	VE-30000345	EL CAP.	10UF 50V M
	C713	VE-30016654	SMD CAP.	100NF 16V K R
	C714	VE-30000100	MKT CAP.	330NF 63V J
	C716	VE-30000100	MKT CAP.	330NF 63V J
	C717	VE-30000100	MKT CAP.	330NF 63V J
	C718	VE-30000100	MKT CAP.	330NF 63V J
	C719	VE-30016654	SMD CAP.	100NF 16V K R
	C720	VE-30000345	EL CAP.	10UF 50V M
	C721	VE-30000100	MKT CAP.	330NF 63V J
	C723	VE-30000100	MKT CAP.	330NF 63V J
	C724	VE-30000345	EL CAP.	10UF 50V M
	C729	VE-30016654	SMD CAP.	100NF 16V K R
	C730	VE-30000393	EL CAP.	3.3UF 50V M
	C733	VE-30000345	EL CAP.	10UF 50V M
	C734	VE-30000345	EL CAP.	10UF 50V M
	C735	VE-30016654	SMD CAP.	100NF 16V K R
	C736	VE-30000345	EL CAP.	10UF 50V M
	C737	VE-30000384	EL CAP.	2.2UF 50V M
	C738	VE-30000384	EL CAP.	2.2UF 50V M
	C739	VE-30000384	EL CAP.	2.2UF 50V M
	C740	VE-30000384	EL CAP.	2.2UF 50V M
	C741	VE-30012589	SMD CAP.	4.7NF 50V K
	C742	VE-30012589	SMD CAP.	4.7NF 50V K
	C745	VE-30016654	SMD CAP.	100NF 16V K R
⚠	C801	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C802	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C803	VE-30000433	CER CAP.	1NF 1KV M B
⚠	C804	VE-30000433	CER CAP.	1NF 1KV M B
	C808	VE-30012590	SMD CAP.	47NF 50V K
	C809	VE-30000420	EL CAP.	150UF 400V M
	C810	VE-30000387	EL CAP.	33UF 50V M
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C812	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
⚠	C816	VE-30000440	CER CAP.	2.2NF 4KV M
	C817	VE-30000198	CER CAP.	120PF 500V J SL
	C818	VE-30012590	SMD CAP.	47NF 50V K
	C819	VE-30012590	SMD CAP.	47NF 50V K
	C822	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C826	VE-30000406	EL CAP.	47UF 250V M (HR)
	C827	VE-30000411	EL CAP.	4700UF 16V M
	C828	VE-30012590	SMD CAP.	47NF 50V K
	C829	VE-30000407	EL CAP.	470UF 16V M
	C830	VE-30000383	EL CAP.	2200UF 25V M

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C832	VE-30012590	SMD CAP.	47NF 50V K
	C833	VE-30000407	EL CAP.	470UF 16V M
	C834	VE-30012590	SMD CAP.	47NF 50V K
	C835	VE-30012590	SMD CAP.	47NF 50V K
	C838	VE-30000407	EL CAP.	470UF 16V M
	C839	VE-30000407	EL CAP.	470UF 16V M
	C840	VE-30000407	EL CAP.	470UF 16V M
	C848	VE-30000407	EL CAP.	470UF 16V M
	C850	VE-30000383	EL CAP.	2200UF 25V M
	C851	VE-30012590	SMD CAP.	47NF 50V K
⚠	C852	VE-30000440	CER CAP.	2.2NF 4KV M
	C857	VE-30000106	MKT CAP.	47NF 100V J
	C858	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	C859	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C860	VE-30000296	CER CAP.	100NF 100V Z F
	C872	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	TRANSF			
	TR600	VE-30002090	LINE DRIVER	
⚠	TR601	VE-30017522	FBT TRF	
⚠	TR802	VE-30018785	SMPS TRF	
	COIL			
	L101	VE-30001971	FERRITE BEAT	
	L102	VE-30001971	FERRITE BEAT	
	L106	VE-30001971	FERRITE BEAT	
	L108	VE-30001971	FERRITE BEAT	
	L109	VE-30001971	FERRITE BEAT	
	L110	VE-30001971	FERRITE BEAT	
	L111	VE-30001971	FERRITE BEAT	
	L112	VE-30001971	FERRITE BEAT	
	L113	VE-30001971	FERRITE BEAT	
	L114	VE-30001971	FERRITE BEAT	
	L115	VE-30001971	FERRITE BEAT	
	L116	VE-30001971	FERRITE BEAT	
	L117	VE-30001971	FERRITE BEAT	
	L201	VE-30001979	FIXED COIL	1UH
	L210	VE-30001971	FERRITE BEAT	
	L215	VE-30001971	FERRITE BEAT	
	L401	VE-30001971	FERRITE BEAT	
	L402	VE-30001992	FIXED COIL	10UH
	L403	VE-30001971	FERRITE BEAT	
	L404	VE-30001990	FIXED COIL	6.8UH Q75 K
	L405	VE-30014048	ADJ. COIL	44MHZ
	L406	VE-30001971	FERRITE BEAT	
	L408	VE-30001992	FIXED COIL	10UH
	L501	VE-30001971	FERRITE BEAT	
	L502	VE-30001971	FERRITE BEAT	
	L503	VE-30001971	FERRITE BEAT	
	L504	VE-30001971	FERRITE BEAT	
	L600	VE-30002031	FIXED COIL	15MH
	L602	VE-30002156	LINEARITY COIL	30UH
	L603	VE-30002026	FIXED COIL	1MH
	L700	VE-30001971	FERRITE BEAT	
	L701	VE-30001971	FERRITE BEAT	
	L702	VE-30001992	FIXED COIL	10UH
	L703	VE-30001971	FERRITE BEAT	
	L704	VE-30001971	FERRITE BEAT	
	L801	VE-30002011	CHOKE COIL	150UH
	L803	VE-30001992	FIXED COIL	10UH
	DIODE			
	D105	VE-30007760	ZENER DIODE	
	D106	VE-30007760	ZENER DIODE	
	D107	VE-30007760	ZENER DIODE	
	D303	VE-30001329	DIODE	
	D405	VE-30007763	ZENER DIODE	
	D407	VE-30001284	DIODE	
	D408	VE-30001285	DIODE	
	D409	VE-30001284	DIODE	
	D413	VE-30018526	ZENER DIODE	
	D501	VE-30001285	DIODE	
	D505	VE-30001285	DIODE	
	D506	VE-30001284	DIODE	
	D512	VE-30001285	DIODE	
	D513	VE-30001369	ZENER DIODE	
	D533	VE-30001377	ZENER DIODE	

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DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D601	VE-30001329	DIODE	
	D603	VE-30001285	DIODE	
	D605	VE-30001320	DIODE	
	D606	VE-30001323	DIODE	
	D609	VE-30001318	DIODE	
	D610	VE-30001318	DIODE	
	D613	VE-30001318	DIODE	
	D614	VE-30001285	DIODE	
	D616	VE-30003696	DIODE	
	D617	VE-30001318	DIODE	
	D651	VE-30001285	DIODE	
	D653	VE-30001285	DIODE	
	D656	VE-30007763	ZENER DIODE	
	D657	VE-30007763	ZENER DIODE	
	D658	VE-30007763	ZENER DIODE	
	D659	VE-30001350	ZENER DIODE	
	D660	VE-30001347	ZENER DIODE	
	D661	VE-30001350	ZENER DIODE	
	D700	VE-30001285	DIODE	
	D701	VE-30001369	ZENER DIODE	
	D800	VE-30001318	DIODE	
	D801	VE-30001372	ZENER DIODE	
	D802	VE-30001318	DIODE	
	D803	VE-30001315	DIODE	
	D804	VE-30001318	DIODE	
	D805	VE-30001315	DIODE	
	D806	VE-30001315	DIODE	
	D808	VE-20092405	CN.ASY	
	D809	VE-30001329	DIODE	
	D810	VE-30009366	DIODE	
	D811	VE-30009366	DIODE	
	D812	VE-30001285	DIODE	
	D889	VE-30001384	TR	
⚠	D891	VE-30007758	BRIDGE DIODE	
	D892	VE-30001318	DIODE	
	D893	VE-30001318	DIODE	
	D894	VE-30001285	DIODE	
	D897	VE-30001329	DIODE	

TRANSISTOR

	Q104	VE-30001457	TR	
	Q106	VE-30001457	TR	
	Q141	VE-30001457	TR	
	Q142	VE-30001457	TR	
	Q307	VE-30001457	TR	
	Q316	VE-30001458	TR	
	Q403	VE-30001457	TR	
	Q404	VE-30001457	TR	
	Q503	VE-30001457	TR	
	Q504	VE-30001458	TR	
	Q600	VE-30001435	TR	
⚠	Q601	VE-30001441	TR	H.OUT
	Q602	VE-30001429	TR	
	Q603	VE-30001458	TR	
	Q604	VE-30001457	TR	
	Q605	VE-30001458	TR	
	Q700	VE-30001458	TR	
	Q801	VE-30001386	TR	
	Q802	VE-30001457	TR	
	Q804	VE-30001454	TR	

IC

	IC301	VE-30016113	IC	
	IC403	VE-30014510	IC	
	IC500	VE-20101623	IC	(SERVICE)
	IC501	VE-20093395	IC	(MICOM)
	IC601	VE-30013985	IC	
	IC700	VE-30013658	IC	
	IC800	VE-30011968	IC	
⚠	IC801	VE-30015087	IC	
	IC802	VE-30001622	IC	
	IC803	VE-30001500	IC	
	IC804	VE-30001622	IC	
	IC818	VE-30001506	IC	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
⚠	TR801	VE-30002104	LINE FILTER	
⚠	F801	VE-30001731	FUSE	2.5A
⚠	TH800	VE-30001270	PTC	9 OHM
	TU201	VE-30009637	TUNER	
	VR800	VE-30001064	RES ADJ	
	X401	VE-30001749	XTAL	
	X402	VE-30015592	XTAL	
	X501	VE-30002851	XTAL	
	X700	VE-30001756	XTAL	
	Z401	VE-30013163	SAW FILTER	
	Z402	VE-30014261	SAW FILTER	
	Z404	VE-30001724	SER FILTER	

CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

PRINTED WIRING BOARD PARTS LIST

[AV-28BS88EN]

MAIN P.W. BOARD ASS'Y (VE-20101578)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R102	VE-30012657	SMD RES.	1/16W 1K J
	R103	VE-30012657	SMD RES.	1/16W 1K J
	R106	VE-30012713	SMD RES.	1/16W 75R J
	R107	VE-30012649	SMD RES.	1/16W 150R J
	R109	VE-30012713	SMD RES.	1/16W 75R J
	R110	VE-30012713	SMD RES.	1/16W 75R J
	R111	VE-30012649	SMD RES.	1/16W 150R J
	R113	VE-30012713	SMD RES.	1/16W 75R J
	R114	VE-30012713	SMD RES.	1/16W 75R J
	R115	VE-30012713	SMD RES.	1/16W 75R J
	R117	VE-30000792	CF RES.	1/4W 75R J
	R118	VE-30012713	SMD RES.	1/16W 75R J
	R121	VE-30012649	SMD RES.	1/16W 150R J
	R122	VE-30000792	CF RES.	1/4W 75R J
	R123	VE-30000792	CF RES.	1/4W 75R J
	R124	VE-30012649	SMD RES.	1/16W 150R J
	R126	VE-30012657	SMD RES.	1/16W 1K J
	R129	VE-30012713	SMD RES.	1/16W 75R J
	R135	VE-30012657	SMD RES.	1/16W 1K J
	R137	VE-30000466	CF RES.	1/4W 1K J
	R138	VE-30012657	SMD RES.	1/16W 1K J
	R139	VE-30012713	SMD RES.	1/16W 75R J
	R141	VE-30012657	SMD RES.	1/16W 1K J
	R145	VE-30012713	SMD RES.	1/16W 75R J
	R149	VE-30012703	SMD RES.	1/16W 56K J
	R151	VE-30012696	SMD RES.	1/16W 47K J
	R152	VE-30000752	CF RES.	1/4W 56K J
	R153	VE-30012657	SMD RES.	1/16W 1K J
	R154	VE-30000723	CF RES.	1/4W 47K J
	R155	VE-30012649	SMD RES.	1/16W 150R J
	R169	VE-30012703	SMD RES.	1/16W 56K J
	R171	VE-30012713	SMD RES.	1/16W 75R J
	R172	VE-30012692	SMD RES.	1/16W 4.7K J
	R174	VE-30012713	SMD RES.	1/16W 75R J
	R175	VE-30012713	SMD RES.	1/16W 75R J
	R176	VE-30012703	SMD RES.	1/16W 56K J
	R201	VE-30012674	SMD RES.	1/16W 27K J
	R202	VE-30012692	SMD RES.	1/16W 4.7K J
	R204	VE-30000459	CF RES.	1/4W 100R J
	R206	VE-30000459	CF RES.	1/4W 100R J
	R319	VE-30014076	SMD RES.	1/16W 4.7R J
	R320	VE-30014076	SMD RES.	1/16W 4.7R J
	R324	VE-30012667	SMD RES.	1/16W 220K J
	R328	VE-30012649	SMD RES.	1/16W 150R J
	R329	VE-30012692	SMD RES.	1/16W 4.7K J
	R332	VE-30012641	SMD RES.	1/16W 10K J
	R333	VE-30012702	SMD RES.	1/16W 560R J
	R338	VE-30012641	SMD RES.	1/16W 10K J
	R340	VE-30012644	SMD RES.	1/16W 12K J
	R341	VE-30012702	SMD RES.	1/16W 560R J
	R343	VE-30012659	SMD RES.	1/16W 2.2K J
	R370	VE-30012669	SMD RES.	1/16W 22K J
	R371	VE-30012669	SMD RES.	1/16W 22K J
	R391	VE-30012696	SMD RES.	1/16W 47K J
	R417	VE-30012510	SMD RES.	1/16W 100R J
	R418	VE-30012510	SMD RES.	1/16W 100R J
	R419	VE-30012649	SMD RES.	1/16W 150R J
	R420	VE-30000466	CF RES.	1/4W 1K J
	R421	VE-30012650	SMD RES.	1/16W 15K J
	R422	VE-30012659	SMD RES.	1/16W 2.2K J
	R423	VE-30012712	SMD RES.	1/16W 8.2K J
	R425	VE-30012510	SMD RES.	1/16W 100R J
	R426	VE-30012659	SMD RES.	1/16W 2.2K J
	R427	VE-30012674	SMD RES.	1/16W 27K J
	R428	VE-30012510	SMD RES.	1/16W 100R J
	R430	VE-30012702	SMD RES.	1/16W 560R J
	R431	VE-30012674	SMD RES.	1/16W 27K J
	R432	VE-30012707	SMD RES.	1/16W 680R J
	R433	VE-30012683	SMD RES.	1/16W 330K J
	R437	VE-30000466	CF RES.	1/4W 1K J
	R438	VE-30000466	CF RES.	1/4W 1K J
	R439	VE-30012657	SMD RES.	1/16W 1K J
	R440	VE-30012714	SMD RES.	1/16W 820R J
	R441	VE-30012674	SMD RES.	1/16W 27K J
	R442	VE-30000466	CF RES.	1/4W 1K J
	R446	VE-30012714	SMD RES.	1/16W 820R J
	R447	VE-30012714	SMD RES.	1/16W 820R J
	R448	VE-30012683	SMD RES.	1/16W 330K J
	R449	VE-30012659	SMD RES.	1/16W 2.2K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R450	VE-30012702	SMD RES.	1/16W 560R J
	R458	VE-30012510	SMD RES.	1/16W 100R J
	R459	VE-30012668	SMD RES.	1/16W 220R J
	R460	VE-30012668	SMD RES.	1/16W 220R J
	R461	VE-30012668	SMD RES.	1/16W 220R J
	R462	VE-30012510	SMD RES.	1/16W 100R J
	R467	VE-30000670	CF RES.	1/4W 330K J
	R468	VE-30000670	CF RES.	1/4W 330K J
	R469	VE-30000628	CF RES.	1/4W 2.7K J
	R471	VE-30014022	SMD RES.	1/16W 47R J
	R472	VE-30012662	SMD RES.	1/16W 2.7K J
	R474	VE-30012662	SMD RES.	1/16W 2.7K J
	R481	VE-30000466	CF RES.	1/4W 1K J
	R482	VE-30012657	SMD RES.	1/16W 1K J
	R483	VE-30012657	SMD RES.	1/16W 1K J
	R485	VE-30012657	SMD RES.	1/16W 1K J
	R486	VE-30012657	SMD RES.	1/16W 1K J
	R487	VE-30012657	SMD RES.	1/16W 1K J
	R507	VE-30000466	CF RES.	1/4W 1K J
	R508	VE-30012510	SMD RES.	1/16W 100R J
	R509	VE-30012641	SMD RES.	1/16W 10K J
	R510	VE-30012702	SMD RES.	1/16W 560R J
	R511	VE-30012657	SMD RES.	1/16W 1K J
	R512	VE-30000495	CF RES.	1/4W 1.2K J
	R513	VE-30000459	CF RES.	1/4W 100R J
	R514	VE-30000459	CF RES.	1/4W 100R J
	R515	VE-30012659	SMD RES.	1/16W 2.2K J
	R516	VE-30012659	SMD RES.	1/16W 2.2K J
	R517	VE-30012692	SMD RES.	1/16W 4.7K J
	R518	VE-30000471	CF RES.	1/4W 10K J
	R519	VE-30012698	SMD RES.	1/16W 5.6K J
	R525	VE-30012649	SMD RES.	1/16W 150R J
	R526	VE-30012641	SMD RES.	1/16W 10K J
	R527	VE-30012692	SMD RES.	1/16W 4.7K J
	R528	VE-30012698	SMD RES.	1/16W 5.6K J
	R529	VE-30012698	SMD RES.	1/16W 5.6K J
	R530	VE-30012698	SMD RES.	1/16W 5.6K J
	R532	VE-30012659	SMD RES.	1/16W 2.2K J
	R533	VE-30012644	SMD RES.	1/16W 12K J
	R534	VE-30000628	CF RES.	1/4W 2.7K J
	R537	VE-30012641	SMD RES.	1/16W 10K J
	R538	VE-30012698	SMD RES.	1/16W 5.6K J
	R539	VE-30012659	SMD RES.	1/16W 2.2K J
	R540	VE-30012644	SMD RES.	1/16W 12K J
	R545	VE-30012644	SMD RES.	1/16W 12K J
	R548	VE-30012641	SMD RES.	1/16W 10K J
	R554	VE-30012641	SMD RES.	1/16W 10K J
	R555	VE-30012659	SMD RES.	1/16W 2.2K J
	R556	VE-30012657	SMD RES.	1/16W 1K J
	R560	VE-30012674	SMD RES.	1/16W 27K J
	R561	VE-30012692	SMD RES.	1/16W 4.7K J
	R568	VE-30000594	CF RES.	1/4W 22K J
	R572	VE-30012659	SMD RES.	1/16W 2.2K J
	R573	VE-30012641	SMD RES.	1/16W 10K J
	R574	VE-30012657	SMD RES.	1/16W 1K J
	R603	VE-30000459	CF RES.	1/4W 100R J
	R604	VE-30012510	SMD RES.	1/16W 100R J
	R606	VE-30000471	CF RES.	1/4W 10K J
	R607	VE-30000554	CF RES.	1/4W 180R J
	R608	VE-30000859	MF RES.	1/2W 1R F
	R609	VE-30000711	CF RES.	1/2W 470R J
	R610	VE-30000599	CF RES.	1/4W 220K J
	R611	VE-30012708	SMD RES.	1/16W 68K J
	R614	VE-30012509	SMD RES.	1/16W 100K J
	R616	VE-30012669	SMD RES.	1/16W 22K J
	R617	VE-30000572	CF RES.	1/4W 2K J
	R630	VE-30012702	SMD RES.	1/16W 560R J
	R634	VE-30000633	CF RES.	1/4W 27K J
	R639	VE-30000471	CF RES.	1/4W 10K J
	R640	VE-30000628	CF RES.	1/4W 2.7K J
	R646	VE-30000531	CF RES.	1/4W 15K J
	R647	VE-30000466	CF RES.	1/4W 1K J
⚠	R648	VE-30001246	FUSE RES.	1W 0.47R J
	R650	VE-30012702	SMD RES.	1/16W 560R J
	R651	VE-30012668	SMD RES.	1/16W 220R J
⚠	R656	VE-30001230	FUSE RES.	1/2W 27R J
⚠	R657	VE-30001228	FUSE RES.	1/2W 2.2R J
	R662	VE-30012674	SMD RES.	1/16W 27K J
	R666	VE-30000815	CF RES.	1/4W 8.2K J

[AV-28BS88EN]

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R668	VE-30000790	CF RES.	1/4W 6.8R J
	R669	VE-30012510	SMD RES.	1/16W 100R J
	R670	VE-30012510	SMD RES.	1/16W 100R J
	R674	VE-30012662	SMD RES.	1/16W 2.7K J
⚠	R675	VE-30001244	FUSE RES.	1/2W 0.47R J
	R677	VE-30001124	MO RES.	3W 220R J
	R678	VE-30014022	SMD RES.	1/16W 47R J
	R680	VE-30000477	CF RES.	1/4W 100K J
	R681	VE-30012509	SMD RES.	1/16W 100K J
	R682	VE-30008856	MO RES.	2W 270R J
	R683	VE-30017083	WW RES.	5W 2.2K J RAD.
	R689	VE-30000718	CF RES.	1/4W 4.7K J
	R690	VE-30000466	CF RES.	1/4W 1K J
	R691	VE-30012696	SMD RES.	1/16W 47K J
	R692	VE-30012509	SMD RES.	1/16W 100K J
	R693	VE-30012708	SMD RES.	1/16W 68K J
	R694	VE-30000689	CF RES.	1/4W 3.9K J
	R695	VE-30000471	CF RES.	1/4W 10K J
	R696-Y	VE-30001350	ZENER DIODE	12V
	R697	VE-30000712	CF RES.	1/4W 470R J
	R698	VE-30012657	SMD RES.	1/16W 1K J
	R699	VE-30012685	SMD RES.	1/16W 33K J
	R700	VE-30012649	SMD RES.	1/16W 150R J
	R701	VE-30000459	CF RES.	1/4W 100R J
	R703	VE-30000459	CF RES.	1/4W 100R J
	R705	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30012702	SMD RES.	1/16W 560R J
	R717	VE-30012702	SMD RES.	1/16W 560R J
	R719	VE-30012657	SMD RES.	1/16W 1K J
	R721	VE-30012510	SMD RES.	1/16W 100R J
	R722	VE-30012510	SMD RES.	1/16W 100R J
	R723	VE-30012510	SMD RES.	1/16W 100R J
	R724	VE-30012510	SMD RES.	1/16W 100R J
	R801	VE-30000718	CF RES.	1/4W 4.7K J
	R803	VE-30012659	SMD RES.	1/16W 2.2K J
	R805	VE-30000650	CF RES.	1/4W 33R J
	R806	VE-30000982	MF RES.	1/4W 4.7K J
	R807	VE-30001173	MO RES.	1W 0.47R J
	R809	VE-30007784	MO RES.	5W 33K J(RADIAL)
⚠	R810	VE-30001257	MG RES.	1/2W 4.7M J
	R811	VE-30000718	CF RES.	1/4W 4.7K J
	R812	VE-30012641	SMD RES.	1/16W 10K J
	R813	VE-30000466	CF RES.	1/4W 1K J
	R814	VE-30000466	CF RES.	1/4W 1K J
	R817	VE-30000880	MF RES.	1/4W 130K F
	R818	VE-30012675	SMD RES.	1/16W 2K J
	R819	VE-30000526	CF RES.	1/4W 1.5K J
	R828	VE-30000530	CF RES.	1/2W 15K J
	R829	VE-30000530	CF RES.	1/2W 15K J
	R834	VE-30001159	MO RES.	1W 0.33R J
	R836	VE-30012662	SMD RES.	1/16W 2.7K J
	R839	VE-30000526	CF RES.	1/4W 1.5K J
	R842	VE-30014128	SMD RES.	1/16W 33R J
	R844	VE-30012641	SMD RES.	1/16W 10K J
	R845	VE-30012509	SMD RES.	1/16W 100K J
	R846	VE-30012692	SMD RES.	1/16W 4.7K J
	R847	VE-30014128	SMD RES.	1/16W 33R J
	R848	VE-30012641	SMD RES.	1/16W 10K J
	R849	VE-30012510	SMD RES.	1/16W 100R J
	R851	VE-30000718	CF RES.	1/4W 4.7K J
	R852	VE-30000650	CF RES.	1/4W 33R J
	R853	VE-30012642	SMD RES.	1/16W 120K J
	R855	VE-30000459	CF RES.	1/4W 100R J
	R856	VE-30012694	SMD RES.	1/16W 470K J
	CAPACITOR			
	C141	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
	C142	VE-30007081	EL CAP.	4.7UF 50V M (NPL)
	C143	VE-30012589	SMD CAP.	4.7NF 50V K
	C144	VE-30012589	SMD CAP.	4.7NF 50V K
	C145	VE-30012589	SMD CAP.	4.7NF 50V K
	C146	VE-30012589	SMD CAP.	4.7NF 50V K
	C147	VE-30012589	SMD CAP.	4.7NF 50V K
	C148	VE-30012589	SMD CAP.	4.7NF 50V K
	C149	VE-30012589	SMD CAP.	4.7NF 50V K
	C150	VE-30012589	SMD CAP.	4.7NF 50V K
	C155	VE-30012560	SMD CAP.	100PF 50V J
	C157	VE-30012560	SMD CAP.	100PF 50V J
	C159	VE-30000352	EL CAP.	100UF 16V M
	C160	VE-30000345	EL CAP.	10UF 50V M
	C161	VE-30000345	EL CAP.	10UF 50V M

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C162	VE-30012573	SMD CAP.	47PF 50V J
	C164	VE-30012692	SMD RES.	1/16W 4.7K J
	C165	VE-30000413	EL CAP.	4.7UF 50V M
	C201	VE-30000400	EL CAP.	47UF 50V M
	C205	VE-30000345	EL CAP.	10UF 50V M
	C206	VE-30012610	SMD CAP.	10NF 50V J
	C207	VE-30012610	SMD CAP.	10NF 50V J
	C230	VE-30016654	SMD CAP.	100NF 16V K R
	C246	VE-30000295	CER CAP.	100NF 50V Z F
	C303	VE-30000100	MKT CAP.	330NF 63V J
	C305	VE-30012590	SMD CAP.	47NF 50V K
	C310	VE-30000345	EL CAP.	10UF 50V M
	C333	VE-30000083	MKT CAP.	150NF 63V J
	C363	VE-30000083	MKT CAP.	150NF 63V J
	C364	VE-30012590	SMD CAP.	47NF 50V K
	C366	VE-30000407	EL CAP.	470UF 16V M
	C368	VE-30012590	SMD CAP.	47NF 50V K
	C404	VE-30000190	CER CAP.	100PF 50V J CH
	C408	VE-30012586	SMD CAP.	22NF 50V K
	C409	VE-30000345	EL CAP.	10UF 50V M
	C410	VE-30000384	EL CAP.	2.2UF 50V M
	C411	VE-30000345	EL CAP.	10UF 50V M
	C412	VE-30016654	SMD CAP.	100NF 16V K R
	C413	VE-30000362	EL CAP.	1UF 50V M
	C414	VE-30012585	SMD CAP.	2.2NF 50V K R
	C415	VE-30012581	SMD CAP.	1NF 50V K R
	C416	VE-30000362	EL CAP.	1UF 50V M
	C417	VE-30000362	EL CAP.	1UF 50V M
	C418	VE-30016654	SMD CAP.	100NF 16V K R
	C419	VE-30000384	EL CAP.	2.2UF 50V M
	C420	VE-30000100	MKT CAP.	330NF 63V J
	C422	VE-30000352	EL CAP.	100UF 16V M
	C423	VE-30000352	EL CAP.	100UF 16V M
	C424	VE-30000352	EL CAP.	100UF 16V M
	C425	VE-30016654	SMD CAP.	100NF 16V K R
	C427	VE-30016654	SMD CAP.	100NF 16V K R
	C429	VE-30012589	SMD CAP.	4.7NF 50V K
	C430	VE-30016654	SMD CAP.	100NF 16V K R
	C431	VE-30000362	EL CAP.	1UF 50V M
	C432	VE-30016654	SMD CAP.	100NF 16V K R
	C433	VE-30000345	EL CAP.	10UF 50V M
	C434	VE-30016654	SMD CAP.	100NF 16V K R
	C435	VE-30016654	SMD CAP.	100NF 16V K R
	C436	VE-30000384	EL CAP.	2.2UF 50V M
	C437	VE-30016654	SMD CAP.	100NF 16V K R
	C438	VE-30016654	SMD CAP.	100NF 16V K R
	C439	VE-30016654	SMD CAP.	100NF 16V K R
	C440	VE-30000295	CER CAP.	100NF 50V Z F
	C441	VE-30012582	SMD CAP.	10NF 50V K R
	C442	VE-30000362	EL CAP.	1UF 50V M
	C443	VE-30000362	EL CAP.	1UF 50V M
	C444	VE-30000384	EL CAP.	2.2UF 50V M
	C448	VE-30012586	SMD CAP.	22NF 50V K
	C449	VE-30012560	SMD CAP.	100PF 50V J
	C453	VE-30000352	EL CAP.	100UF 16V M
	C455	VE-30000345	EL CAP.	10UF 50V M
	C459	VE-30012560	SMD CAP.	100PF 50V J
	C501	VE-30016654	SMD CAP.	100NF 16V K R
	C502	VE-30000400	EL CAP.	47UF 50V M
	C504	VE-30016654	SMD CAP.	100NF 16V K R
	C505	VE-30012589	SMD CAP.	4.7NF 50V K
	C507	VE-30000345	EL CAP.	10UF 50V M
	C510	VE-30016654	SMD CAP.	100NF 16V K R
	C511	VE-30012566	SMD CAP.	22PF 50V J
	C513	VE-30000345	EL CAP.	10UF 50V M
	C514	VE-30016654	SMD CAP.	100NF 16V K R
	C515	VE-30012560	SMD CAP.	100PF 50V J
	C517	VE-30016654	SMD CAP.	100NF 16V K R
	C518	VE-30016654	SMD CAP.	100NF 16V K R
	C519	VE-30012560	SMD CAP.	100PF 50V J
	C520	VE-30012560	SMD CAP.	100PF 50V J
	C521	VE-30012562	SMD CAP.	15PF 50V J
	C522	VE-30012562	SMD CAP.	15PF 50V J
	C523	VE-30012585	SMD CAP.	2.2NF 50V K R
	C524	VE-30012566	SMD CAP.	22PF 50V J
	C525	VE-30012566	SMD CAP.	22PF 50V J
	C526	VE-30016654	SMD CAP.	100NF 16V K R
	C527	VE-30000345	EL CAP.	10UF 50V M
	C529	VE-30012589	SMD CAP.	4.7NF 50V K
	C530	VE-30012589	SMD CAP.	4.7NF 50V K
	C532	VE-30016654	SMD CAP.	100NF 16V K R
	C536	VE-30000295	CER CAP.	100NF 50V Z F
	C541	VE-30000362	EL CAP.	1UF 50V M

[AV-28BS88EN]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C542	VE-30000107	MKT CAP.	47NF 250V J
	C543	VE-30000431	CER CAP.	100PF 1KV M
	C544	VE-30000345	EL CAP.	10UF 50V M
	C547	VE-30000345	EL CAP.	10UF 50V M
	C565	VE-30016654	SMD CAP.	100NF 16V K R
	C566	VE-30016654	SMD CAP.	100NF 16V K R
	C567	VE-30000431	CER CAP.	100PF 1KV M
	C602	VE-30017319	MKT CAP.	120NF 63V J
	C604	VE-30000356	EL CAP.	100UF 63V M
	C605	VE-30000360	EL CAP.	1000UF 25V M
	C607	VE-30012581	SMD CAP.	1NF 50V K R
⚠	C618	VE-30000159	MKP CAP.	4.7NF 1.6KV J
⚠	C621	VE-30000179	MKP CAP.	9.1NF 1600V 9.5
	C622	VE-30000121	KP CAP.	27NF 630V J
⚠	C625	VE-30000156	MKP CAP.	430NF 250V J
	C627	VE-30000167	MKP CAP.	560NF 250V J
	C629	VE-30000177	MKP CAP.	820NF 250V J
	C632	VE-30000100	MKT CAP.	330NF 63V J
	C635	VE-30000385	EL CAP.	2.2UF 250V M
	C636	VE-30000387	EL CAP.	33UF 50V M
	C640	VE-30000100	MKT CAP.	330NF 63V J
	C641	VE-30000090	MKT CAP.	22NF 100V J
	C642	VE-30000407	EL CAP.	470UF 16V M
	C644	VE-30000409	EL CAP.	470UF 25V M
	C645	VE-30000090	MKT CAP.	22NF 100V J
	C646	VE-30000100	MKT CAP.	330NF 63V J
	C647	VE-30007748	EL CAP.	1000UF 35V M
	C648	VE-30000394	EL CAP.	3.3UF 160V M
	C649	VE-30000295	CER CAP.	100NF 50V Z F
	C652	VE-30000330	CER CAP.	4.7NF 50V K B
	C653	VE-30000107	MKT CAP.	47NF 250V J
	C655	VE-30000415	EL CAP.	4.7UF 250V M
	C700	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C701	VE-30012565	SMD CAP.	1.8PF 50V J CH
	C702	VE-30012576	SMD CAP.	56PF 50V J CH
	C703	VE-30012576	SMD CAP.	56PF 50V J CH
	C704	VE-30012576	SMD CAP.	56PF 50V J CH
	C705	VE-30000345	EL CAP.	10UF 50V M
	C706	VE-30000345	EL CAP.	10UF 50V M
	C708	VE-30016654	SMD CAP.	100NF 16V K R
	C712	VE-30000345	EL CAP.	10UF 50V M
	C713	VE-30016654	SMD CAP.	100NF 16V K R
	C714	VE-30000100	MKT CAP.	330NF 63V J
	C716	VE-30000100	MKT CAP.	330NF 63V J
	C717	VE-30000100	MKT CAP.	330NF 63V J
	C718	VE-30000100	MKT CAP.	330NF 63V J
	C719	VE-30016654	SMD CAP.	100NF 16V K R
	C720	VE-30000345	EL CAP.	10UF 50V M
	C721	VE-30000100	MKT CAP.	330NF 63V J
	C723	VE-30000100	MKT CAP.	330NF 63V J
	C724	VE-30000345	EL CAP.	10UF 50V M
	C729	VE-30016654	SMD CAP.	100NF 16V K R
	C730	VE-30000393	EL CAP.	3.3UF 50V M
	C733	VE-30000345	EL CAP.	10UF 50V M
	C734	VE-30000345	EL CAP.	10UF 50V M
	C735	VE-30016654	SMD CAP.	100NF 16V K R
	C736	VE-30000345	EL CAP.	10UF 50V M
	C737	VE-30000384	EL CAP.	2.2UF 50V M
	C738	VE-30000384	EL CAP.	2.2UF 50V M
	C739	VE-30000384	EL CAP.	2.2UF 50V M
	C740	VE-30000384	EL CAP.	2.2UF 50V M
	C741	VE-30012589	SMD CAP.	4.7NF 50V K
	C742	VE-30012589	SMD CAP.	4.7NF 50V K
	C745	VE-30016654	SMD CAP.	100NF 16V K R
⚠	C801	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C802	VE-30000094	MKT CAP.	220NF 275V M AC
⚠	C803	VE-30000433	CER CAP.	1NF 1KV M B
⚠	C804	VE-30000433	CER CAP.	1NF 1KV M B
	C808	VE-30012590	SMD CAP.	47NF 50V K
	C809	VE-30000420	EL CAP.	150UF 400V M
	C810	VE-30000387	EL CAP.	33UF 50V M
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C812	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
⚠	C816	VE-30000440	CER CAP.	2.2NF 4KV M
	C817	VE-30000198	CER CAP.	120PF 500V J SL
	C818	VE-30012590	SMD CAP.	47NF 50V K
	C819	VE-30012590	SMD CAP.	47NF 50V K
	C822	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C826	VE-30000406	EL CAP.	47UF 250V M (HR)
	C827	VE-30000411	EL CAP.	4700UF 16V M
	C828	VE-30012590	SMD CAP.	47NF 50V K
	C829	VE-30000407	EL CAP.	470UF 16V M
	C830	VE-30000383	EL CAP.	2200UF 25V M

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C832	VE-30012590	SMD CAP.	47NF 50V K
	C833	VE-30000407	EL CAP.	470UF 16V M
	C834	VE-30012590	SMD CAP.	47NF 50V K
	C835	VE-30012590	SMD CAP.	47NF 50V K
	C838	VE-30000407	EL CAP.	470UF 16V M
	C839	VE-30000407	EL CAP.	470UF 16V M
	C840	VE-30000407	EL CAP.	470UF 16V M
	C848	VE-30000407	EL CAP.	470UF 16V M
	C850	VE-30000383	EL CAP.	2200UF 25V M
	C851	VE-30012590	SMD CAP.	47NF 50V K
⚠	C852	VE-30000440	CER CAP.	2.2NF 4KV M
	C857	VE-30000106	MKT CAP.	47NF 100V J
	C858	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	C859	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C860	VE-30000296	CER CAP.	100NF 100V Z F
	C872	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
	TRANSF			
	TR600	VE-30002090	LINE DRIVER	
⚠	TR601	VE-30017522	FBT TRF	
⚠	TR802	VE-30018785	SMPS TRF	
	COIL			
	L101	VE-30001971	FERRITE BEAT	
	L102	VE-30001971	FERRITE BEAT	
	L106	VE-30001971	FERRITE BEAT	
	L108	VE-30001971	FERRITE BEAT	
	L109	VE-30001971	FERRITE BEAT	
	L110	VE-30001971	FERRITE BEAT	
	L111	VE-30001971	FERRITE BEAT	
	L112	VE-30001971	FERRITE BEAT	
	L113	VE-30001971	FERRITE BEAT	
	L114	VE-30001971	FERRITE BEAT	
	L115	VE-30001971	FERRITE BEAT	
	L116	VE-30001971	FERRITE BEAT	
	L117	VE-30001971	FERRITE BEAT	
	L201	VE-30001979	FIXED COIL	1UH
	L210	VE-30001971	FERRITE BEAT	
	L215	VE-30001971	FERRITE BEAT	
	L401	VE-30001971	FERRITE BEAT	
	L402	VE-30001992	FIXED COIL	10UH
	L403	VE-30001971	FERRITE BEAT	
	L405	VE-30014048	ADJ. COIL	44MHZ
	L406	VE-30001971	FERRITE BEAT	
	L408	VE-30001992	FIXED COIL	10UH
	L501	VE-30001971	FERRITE BEAT	
	L502	VE-30001971	FERRITE BEAT	
	L503	VE-30001971	FERRITE BEAT	
	L504	VE-30001971	FERRITE BEAT	
	L600	VE-30002031	FIXED COIL	15MH
	L602	VE-30002156	LINEARITY COIL	30UH
	L603	VE-30002026	FIXED COIL	1MH
	L700	VE-30001971	FERRITE BEAT	
	L701	VE-30001971	FERRITE BEAT	
	L702	VE-30001992	FIXED COIL	10UH
	L703	VE-30001971	FERRITE BEAT	
	L704	VE-30001971	FERRITE BEAT	
	L801	VE-30002011	CHOKE COIL	150UH
	L803	VE-30001992	FIXED COIL	10UH
	DIODE			
	D105	VE-30007760	ZENER DIODE	
	D106	VE-30007760	ZENER DIODE	
	D107	VE-30007760	ZENER DIODE	
	D303	VE-30001329	DIODE	
	D405	VE-30007763	ZENER DIODE	
	D407	VE-30001284	DIODE	
	D408	VE-30001285	DIODE	
	D409	VE-30001284	DIODE	
	D413	VE-30018526	ZENER DIODE	
	D501	VE-30001285	DIODE	
	D505	VE-30001285	DIODE	
	D506	VE-30001284	DIODE	
	D512	VE-30001285	DIODE	
	D513	VE-30001369	ZENER DIODE	
	D533	VE-30001377	ZENER DIODE	

[AV-28BS88EN]

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D601	VE-30001329	DIODE	
	D603	VE-30001285	DIODE	
	D605	VE-30001320	DIODE	
	D606	VE-30001323	DIODE	
	D609	VE-30001318	DIODE	
	D610	VE-30001318	DIODE	
	D613	VE-30001318	DIODE	
	D614	VE-30001285	DIODE	
	D616	VE-30003696	DIODE	
	D617	VE-30001318	DIODE	
	D651	VE-30001285	DIODE	
	D653	VE-30001285	DIODE	
	D656	VE-30007763	ZENER DIODE	
	D657	VE-30007763	ZENER DIODE	
	D658	VE-30007763	ZENER DIODE	
	D659	VE-30001350	ZENER DIODE	
	D660	VE-30001347	ZENER DIODE	
	D661	VE-30001350	ZENER DIODE	
	D700	VE-30001285	DIODE	
	D701	VE-30001369	ZENER DIODE	
	D800	VE-30001318	DIODE	
	D801	VE-30001372	ZENER DIODE	
	D802	VE-30001318	DIODE	
	D803	VE-30001315	DIODE	
	D804	VE-30001318	DIODE	
	D805	VE-30001315	DIODE	
	D806	VE-30001315	DIODE	
	D808	VE-20092405	CN.ASY	
	D809	VE-30001329	DIODE	
	D810	VE-30009366	DIODE	
	D811	VE-30009366	DIODE	
	D812	VE-30001285	DIODE	
	D889	VE-30001384	TR	
⚠	D891	VE-30007758	BRIDGE DIODE	
	D892	VE-30001318	DIODE	
	D893	VE-30001318	DIODE	
	D894	VE-30001285	DIODE	
	D897	VE-30001329	DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q104	VE-30001457	TR	
	Q106	VE-30001457	TR	
	Q141	VE-30001457	TR	
	Q142	VE-30001457	TR	
	Q307	VE-30001457	TR	
	Q316	VE-30001458	TR	
	Q403	VE-30001457	TR	
	Q404	VE-30001457	TR	
	Q503	VE-30001457	TR	
	Q504	VE-30001458	TR	
	Q600	VE-30001435	TR	
⚠	Q601	VE-30001441	TR	H.OUT
	Q602	VE-30001429	TR	
	Q603	VE-30001458	TR	
	Q604	VE-30001457	TR	
	Q605	VE-30001458	TR	
	Q700	VE-30001458	TR	
	Q801	VE-30001386	TR	
	Q802	VE-30001457	TR	
	Q804	VE-30001454	TR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC301	VE-30016113	IC	
	IC403	VE-30014521	IC	
	IC500	VE-20101581	IC	(SERVICE)
	IC501	VE-20101580	IC	(MICOM)
	IC601	VE-30013985	IC	
	IC700	VE-30009354	IC	
	IC800	VE-30011968	IC	
⚠	IC801	VE-30015087	IC	
	IC802	VE-30001622	IC	
	IC803	VE-30001500	IC	
	IC804	VE-30001622	IC	
	IC818	VE-30001506	IC	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
⚠	TR801	VE-30002104	LINE FILTER	
⚠	F801	VE-30001731	FUSE	2.5A
⚠	TH800	VE-30001270	PTC	9 OHM
	TU201	VE-30009637	TUNER	
	VR800	VE-30001064	RES ADJ	
	X401	VE-30001749	XTAL	
	X402	VE-30015592	XTAL	
	X501	VE-30002851	XTAL	
	X700	VE-30001756	XTAL	
	Z401	VE-30001705	SAW FILTER	
	Z402	VE-30015591	SAW FILTER	

CRT SOCKET P.W. BOARD ASS'Y (VE-20094670)

Refer to PARTS LIST in page 30 for this P.W . board

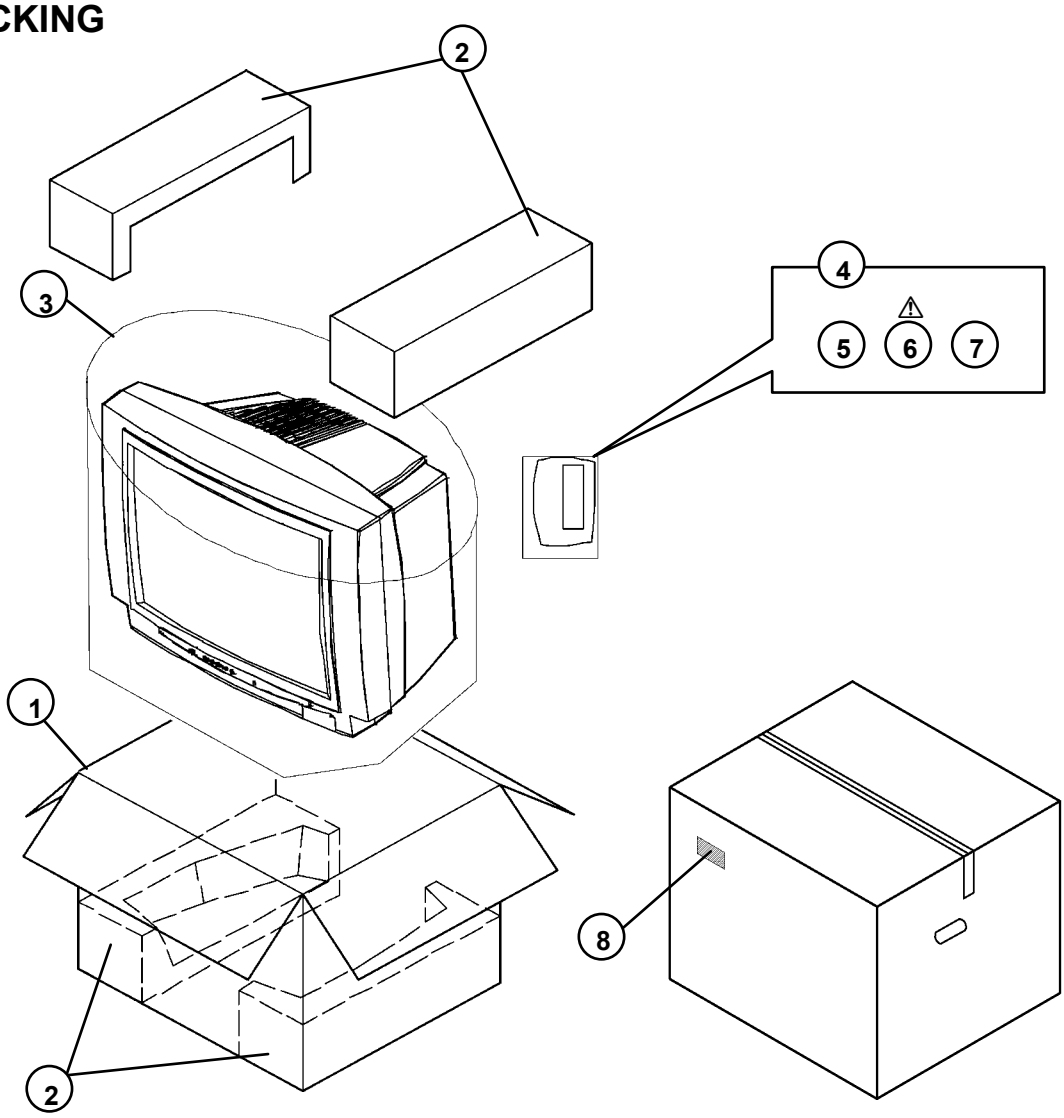
FRONT CONTROL P.W. BOARD ASS'Y (VE-20082481)

Refer to PARTS LIST in page 30 for this P.W . board

FRONT AV & HEADPHONE P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 30 for this P.W . board

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
	1	VE-50028496	CARTON BOX	(AV-28BT8ENS)
	1	VE-50028502	CARTON BOX	(AV-28BT8ENB)
	1	VE-50028500	CARTON BOX	(AV-28BT80EN)
	1	VE-50028498	CARTON BOX	(AV-28BS88EN)
	1	VE-50028423	CARTON BOX	(AV-28BT8EPS)
	1	VE-50028424	CARTON BOX	(AV-28BT8EPB)
	1	VE-50028221	CARTON BOX	(AV-28BT80EP)
	1	VE-50028218	CARTON BOX	(AV-28BT8EES)
	1	VE-50028216	CARTON BOX	(AV-28BT8EEB)
	2	VE-20081396	CUSHION ASS'Y	4pcs in 1set
	3	VE-50026637	POLY BAG	
	4	VE-70000587	POLY BAG	
	5	VE-30017763	REMOTE CONTROL UNIT	(RM-C1100)
⚠	6	VE-50028493	INST BOOK	(AV-28BT8ENS,ENB,AV-28BT80EN)
⚠	6	VE-50028296	INST BOOK	(AV-28BT8EPS,EPB,AV-28BT80EP)
⚠	6	VE-50028326	INST BOOK	(AV-28BT8EES,EEB)
⚠	6	VE-50028511	INST BOOK	(AV-28BS88EN)
	7	BT-54013-2TK	WARRANTY CARD	
	8	VE-20102137	LABEL	(AV-28BT8ENS)
	8	VE-20102147	LABEL	(AV-28BT8ENB)
	8	VE-20102144	LABEL	(AV-28BT80EN)
	8	VE-20102141	LABEL	(AV-28BS88EN)
	8	VE-20101937	LABEL	(AV-28BT8EPS)
	8	VE-20101939	LABEL	(AV-28BT8EPB)
	8	VE-20101934	LABEL	(AV-28BT80EP)
	8	VE-20101919	LABEL	(AV-28BT8EES)
	8	VE-20101920	LABEL	(AV-28BT8EES POLAND)
	8	VE-20101915	LABEL	(AV-28BT8EEB)
	8	VE-20101913	LABEL	(AV-28BT8EEB POLAND)

JVC

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VP 0207
DP20588051

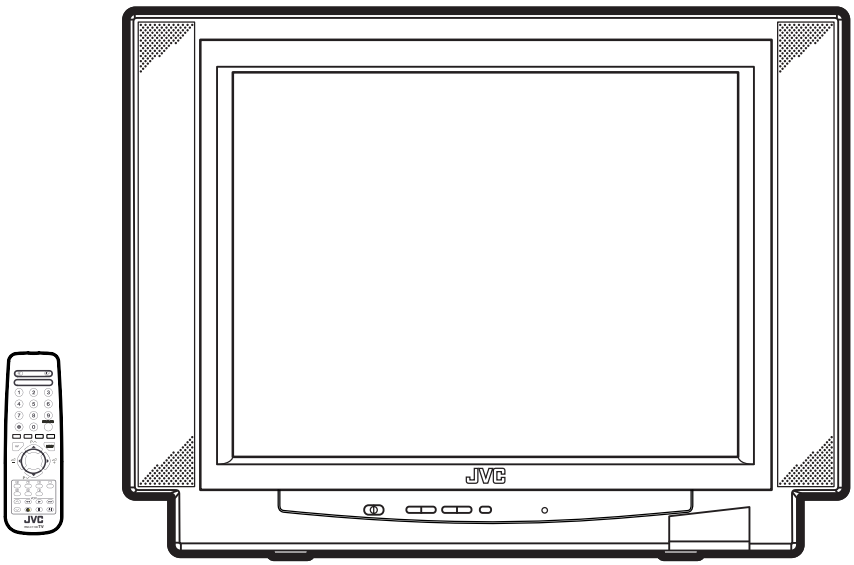
JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV-28BT8ENS / AV-28BT8ENB
AV-28BT80EN / AV-28BT8EPS
AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB
AV-28BS88EN

CD-ROM No.SML200207



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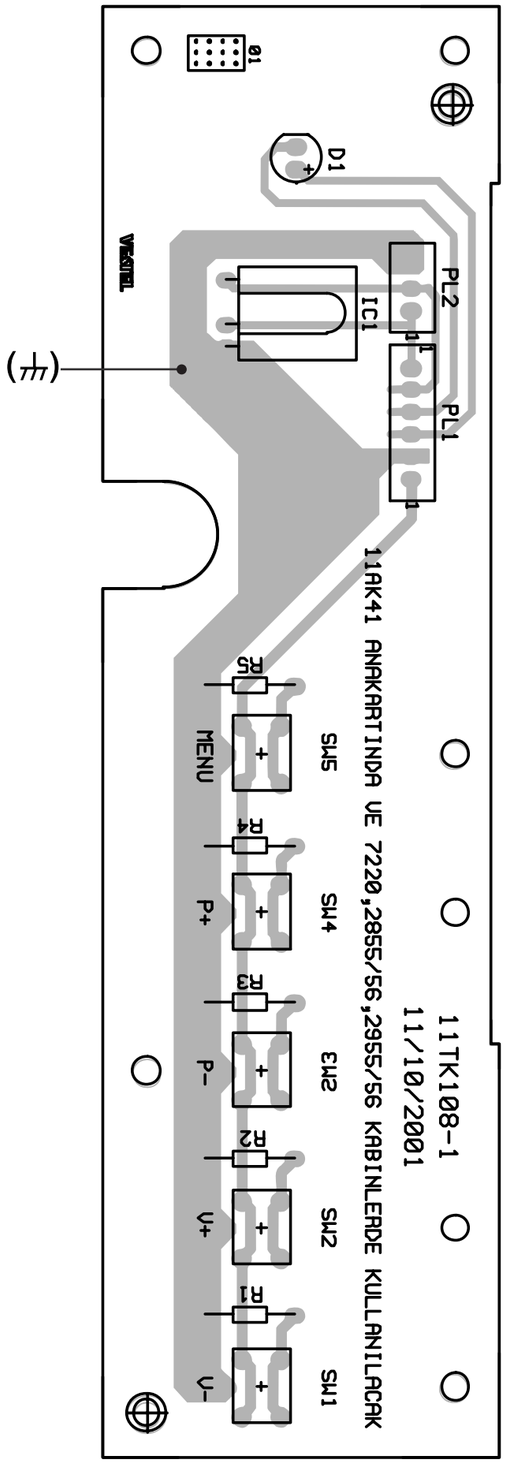
No.52057
Jul. 2002

FRONT CONTROL PWB PATTERN



TOP

VP0207
DP6060

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN
AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP
AV-28BT8EES, AV-28BT8EEB,AV-28BS88EN

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ /V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div :V ⇒ 5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	:[Ω]
K	:[K Ω]
M	:[M Ω]

● Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

4.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND and the ISOLATED(NEUTRAL) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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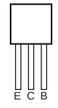
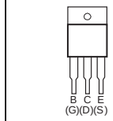
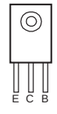
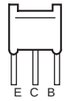
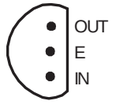
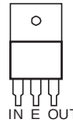
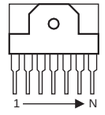
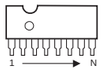
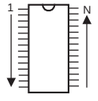
SEMICONDUCTOR SHAPES

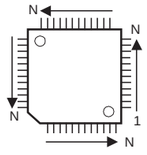
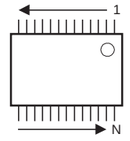
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

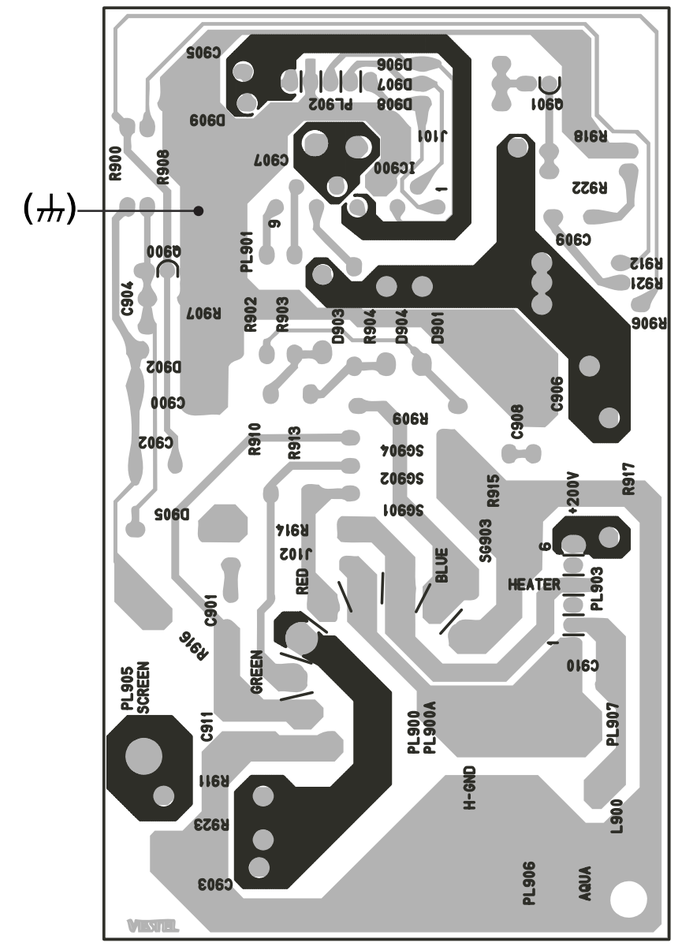
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

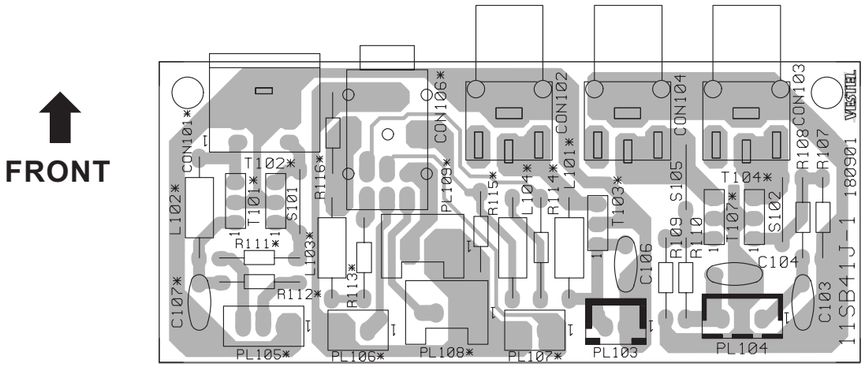
CHIP IC

TOP VIEW		
		

CRT SOCKET PWB PATTERN

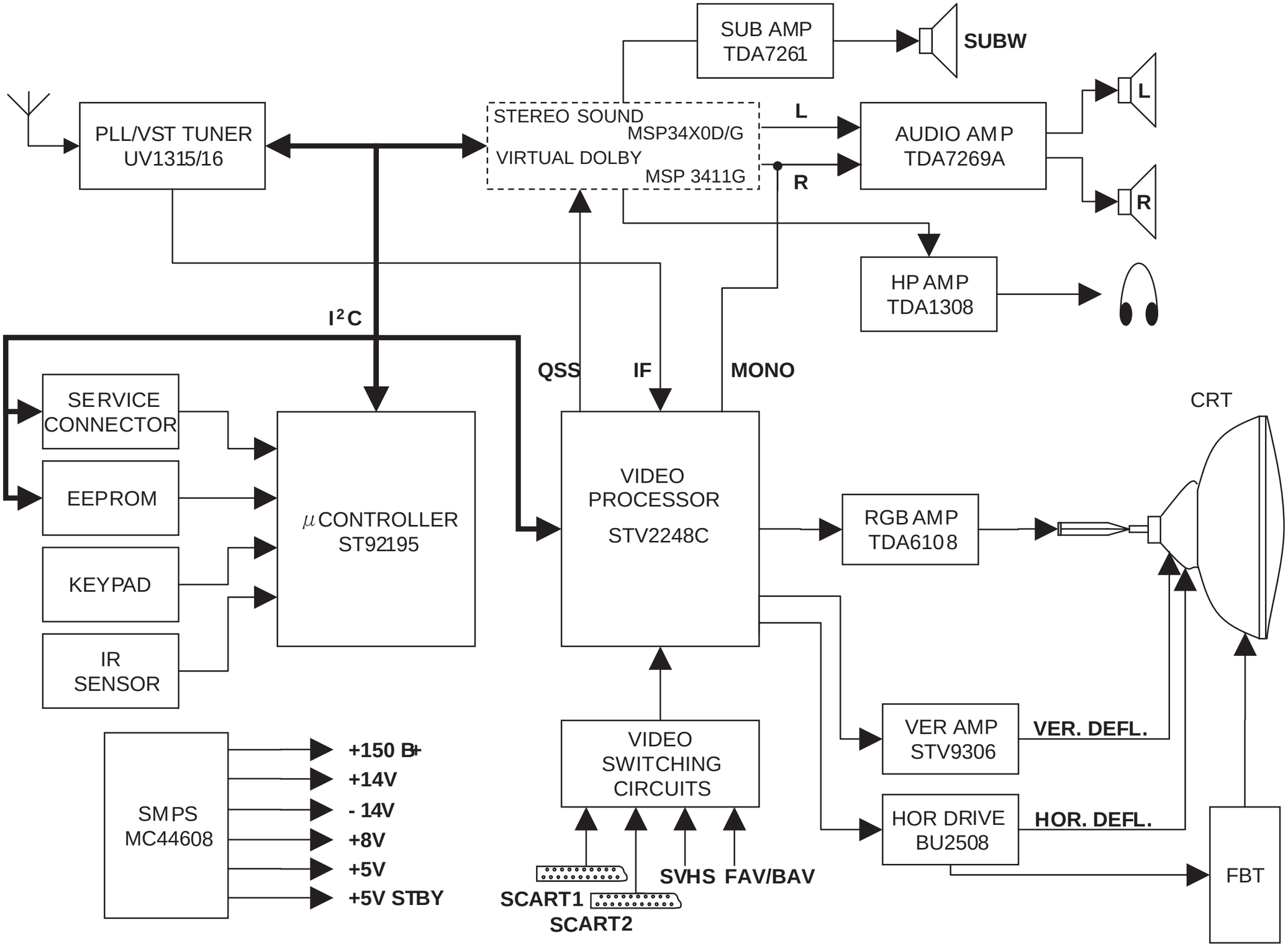


FRONT AV & HEADPHONE PWB PATTERN



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

BLOCK DIAGRAM



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

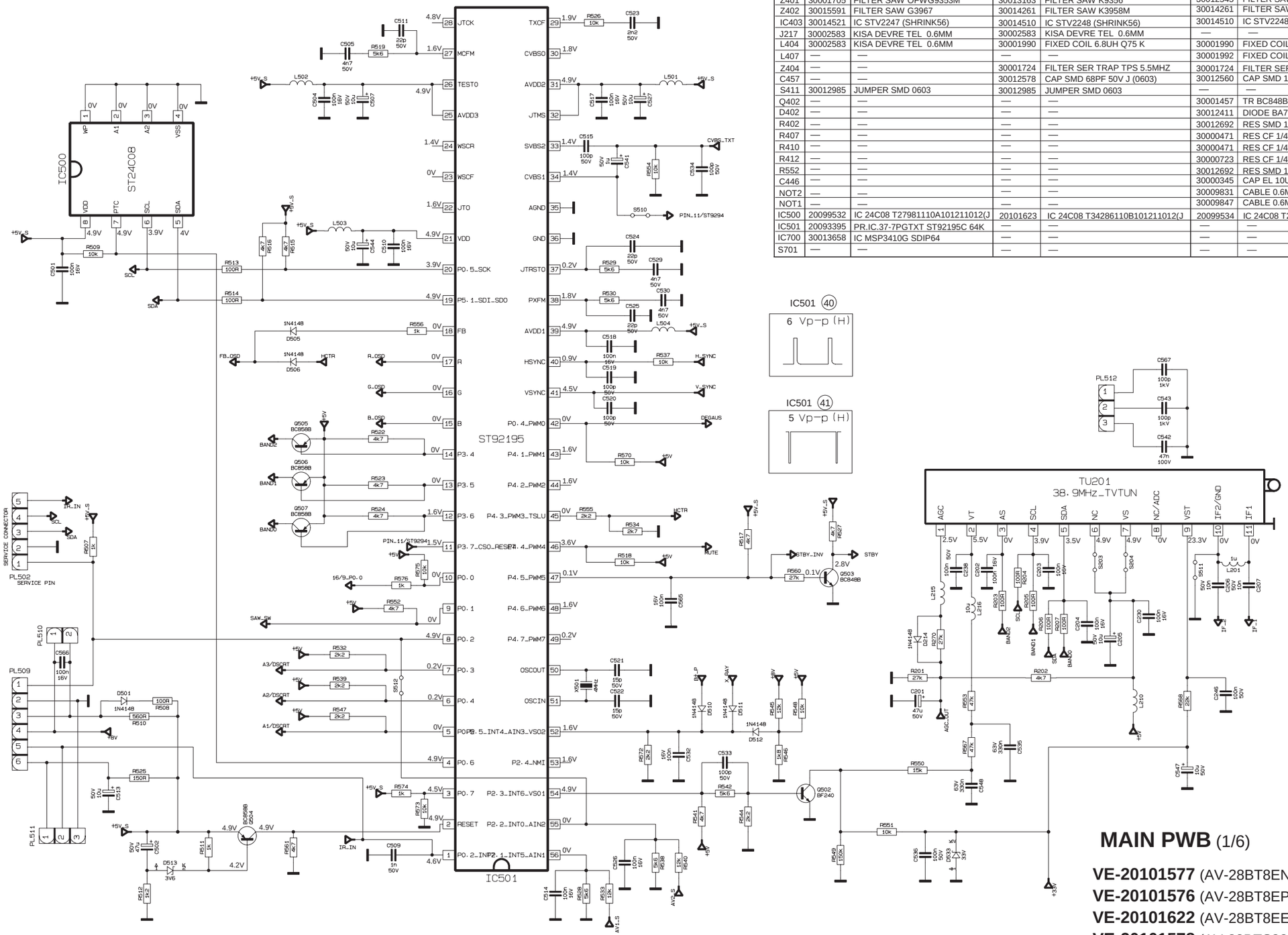
CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM [1/6]*

DIFFERENCE LIST

	EN		EE		EP		AV-28BS88EN	
Z401	30001705	FILTER SAW OFWG9353M	30013163	FILTER SAW K9356	30012545	FILTER SAW K9656M	30001705	FILTER SAW OFWG9353M
Z402	30015591	FILTER SAW G3967	30014261	FILTER SAW K3958M	30014261	FILTER SAW K3958M	30015591	FILTER SAW G3967
IC403	30014521	IC STV2247 (SHRINK56)	30014510	IC STV2248 (SHRINK56)	30014510	IC STV2248 (SHRINK56)	30014521	IC STV2247 (SHRINK56)
J217	30002583	KISA DEVRE TEL 0.6MM	30002583	KISA DEVRE TEL 0.6MM	—	—	30002583	KISA DEVRE TEL 0.6MM
L404	30002583	KISA DEVRE TEL 0.6MM	30001990	FIXED COIL 6.8UH Q75 K	30001990	FIXED COIL 6.8UH Q75 K	30002583	KISA DEVRE TEL 0.6MM
L407	—	—	—	—	30001992	FIXED COIL 10UH Q65 K-A	—	—
Z404	—	—	30001724	FILTER SER TRAP TPS 5.5MHZ	30001724	FILTER SER TRAP TPS 5.5MHZ	—	—
C457	—	—	30012578	CAP SMD 68PF 50V J (0603)	30012560	CAP SMD 100PF 50V J (0603)	—	—
S411	30012985	JUMPER SMD 0603	30012985	JUMPER SMD 0603	—	—	30012985	JUMPER SMD 0603
Q402	—	—	—	—	30001457	TR BC848B SMD	—	—
D402	—	—	—	—	30012411	DIODE BA782 SMD	—	—
R402	—	—	—	—	30012692	RES SMD 1/16W 4.7K J (0603)	—	—
R407	—	—	—	—	30000471	RES CF 1/4W 10K J	—	—
R410	—	—	—	—	30000471	RES CF 1/4W 10K J	—	—
R412	—	—	—	—	30000723	RES CF 1/4W 47K J	—	—
R552	—	—	—	—	30012692	RES SMD 1/16W 4.7K J (0603)	—	—
C446	—	—	—	—	30000345	CAP EL 10UF 50V M	—	—
NOT2	—	—	—	—	30009831	CABLE 0.6MM BLUE (5CM)	—	—
NOT1	—	—	—	—	30009847	CABLE 0.6MM BLUE (8CM)	—	—
IC500	20099532	IC 24C08 T27981110A101211012(J	20101623	IC 24C08 T34286110B101211012(J	20099534	IC 24C08 T28087110A101211012(J	20101581	IC 24C08 T34181110A101211112(J
IC501	20093395	PR.IC.37-7PGTXT ST92195C 64K	—	—	—	—	20101580	PR.IC.37-7PGTXT ST92195C 64K S
IC700	30013658	IC MSP3410G SDIP64	—	—	—	—	30009354	IC MSP3411 SDIP64
S701	—	—	—	—	—	—	30002583	KISA DEVRE TELI 0.6MM

IC501 (40)

IC501 (41)



MAIN PWB (1/6)

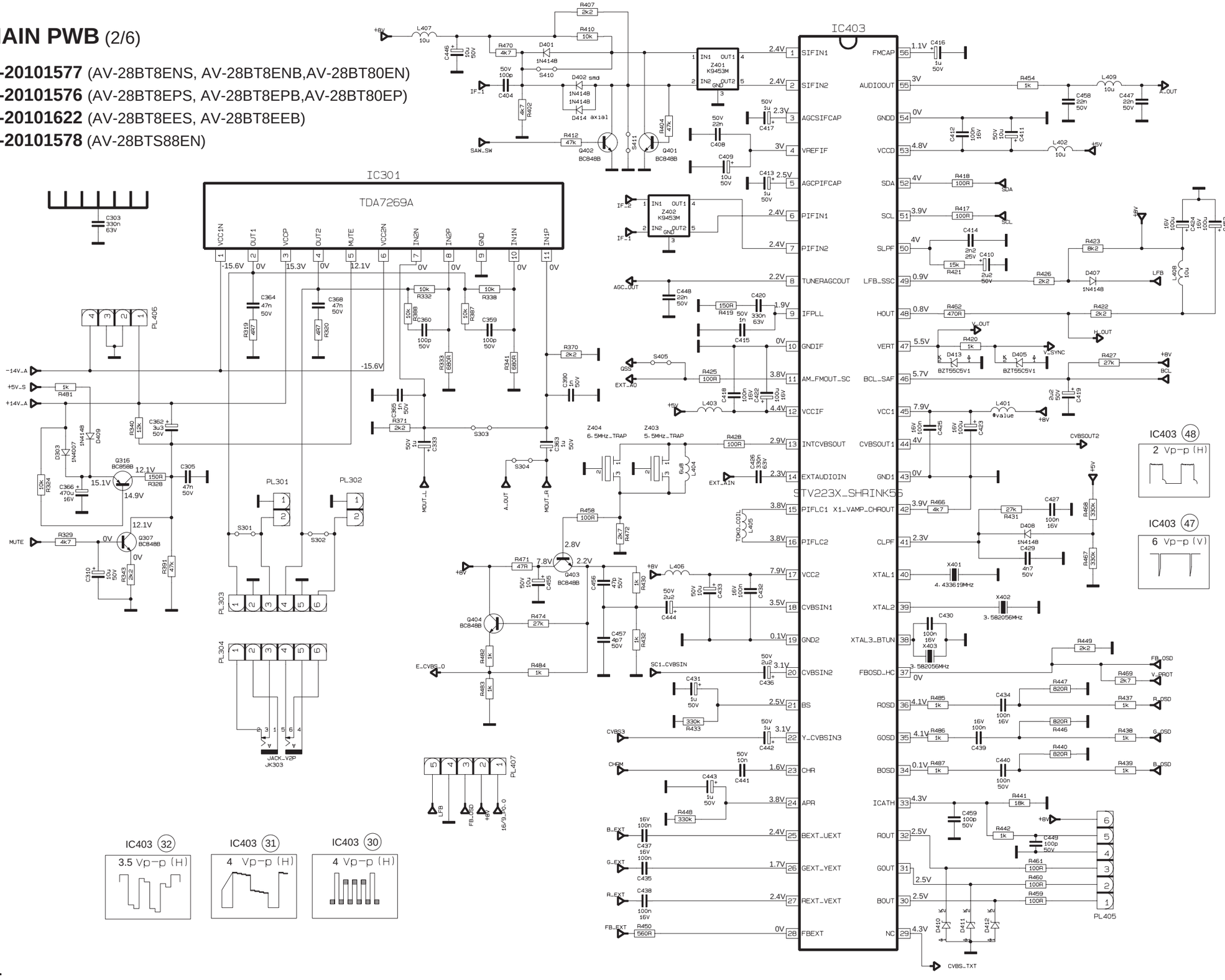
VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

MAIN PWB CIRCUIT DIAGRAM [2/6]

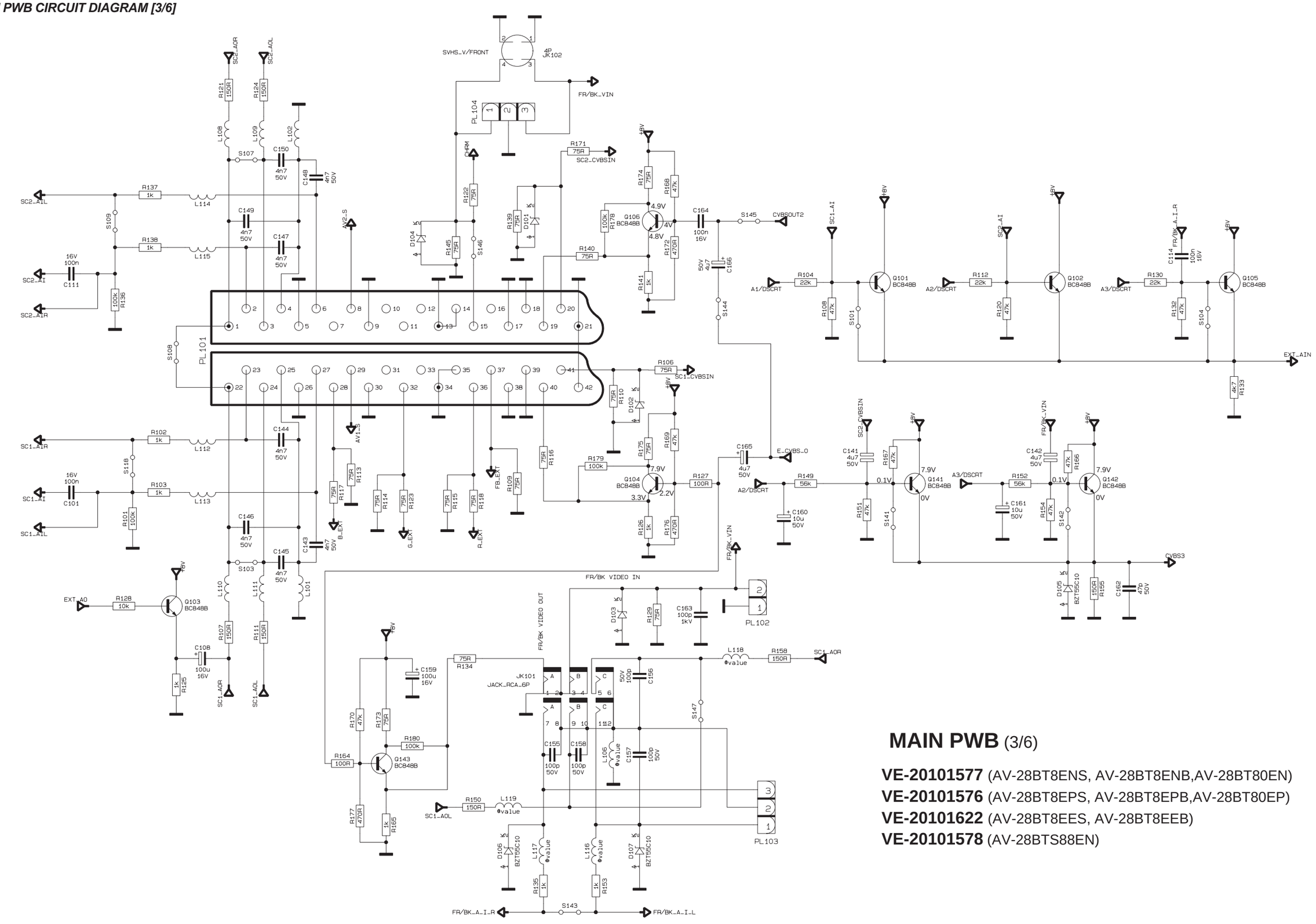
MAIN PWB (2/6)

VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)



AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

MAIN PWB CIRCUIT DIAGRAM [3/6]



MAIN PWB (3/6)

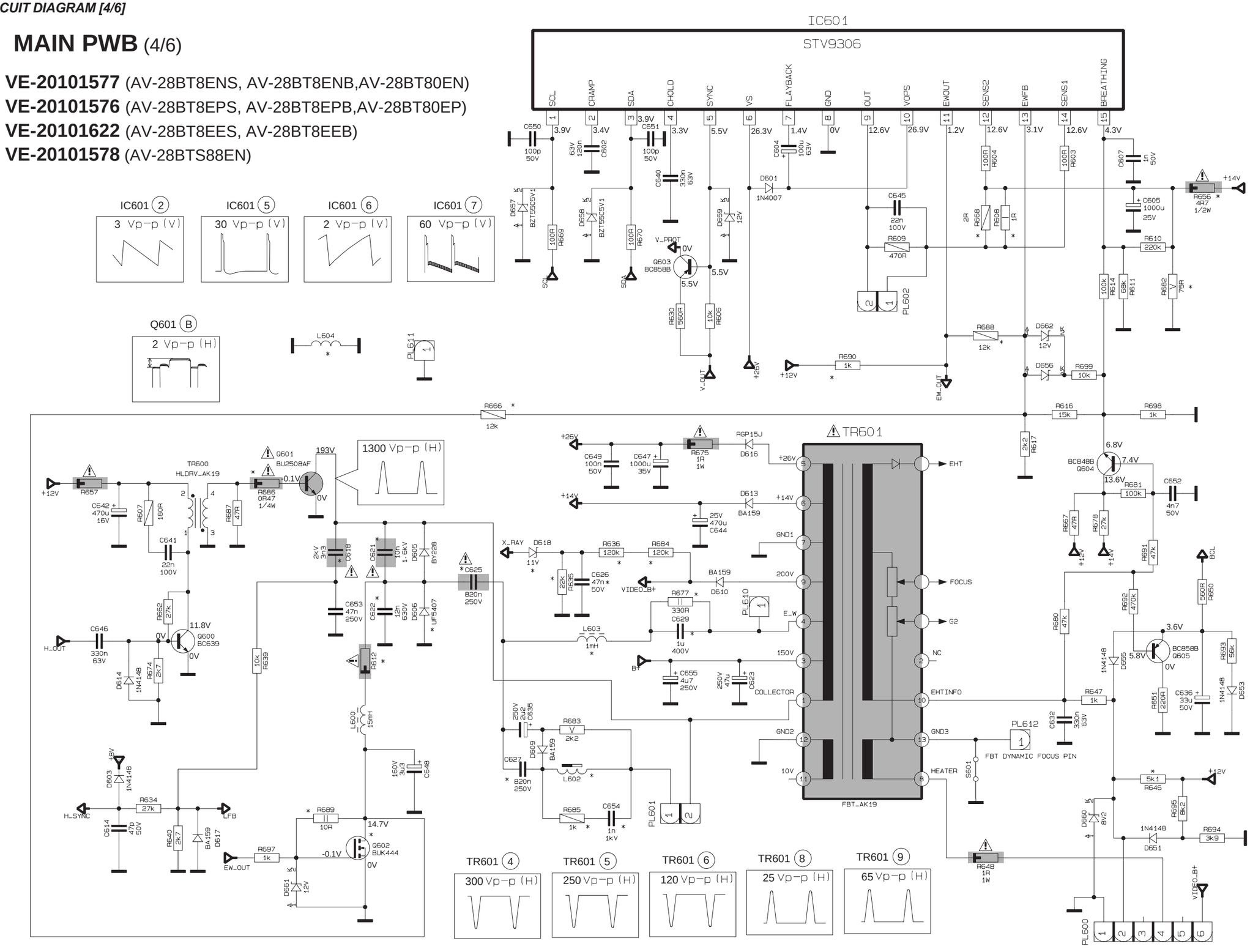
VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

MAIN PWB CIRCUIT DIAGRAM [4/6]

MAIN PWB (4/6)

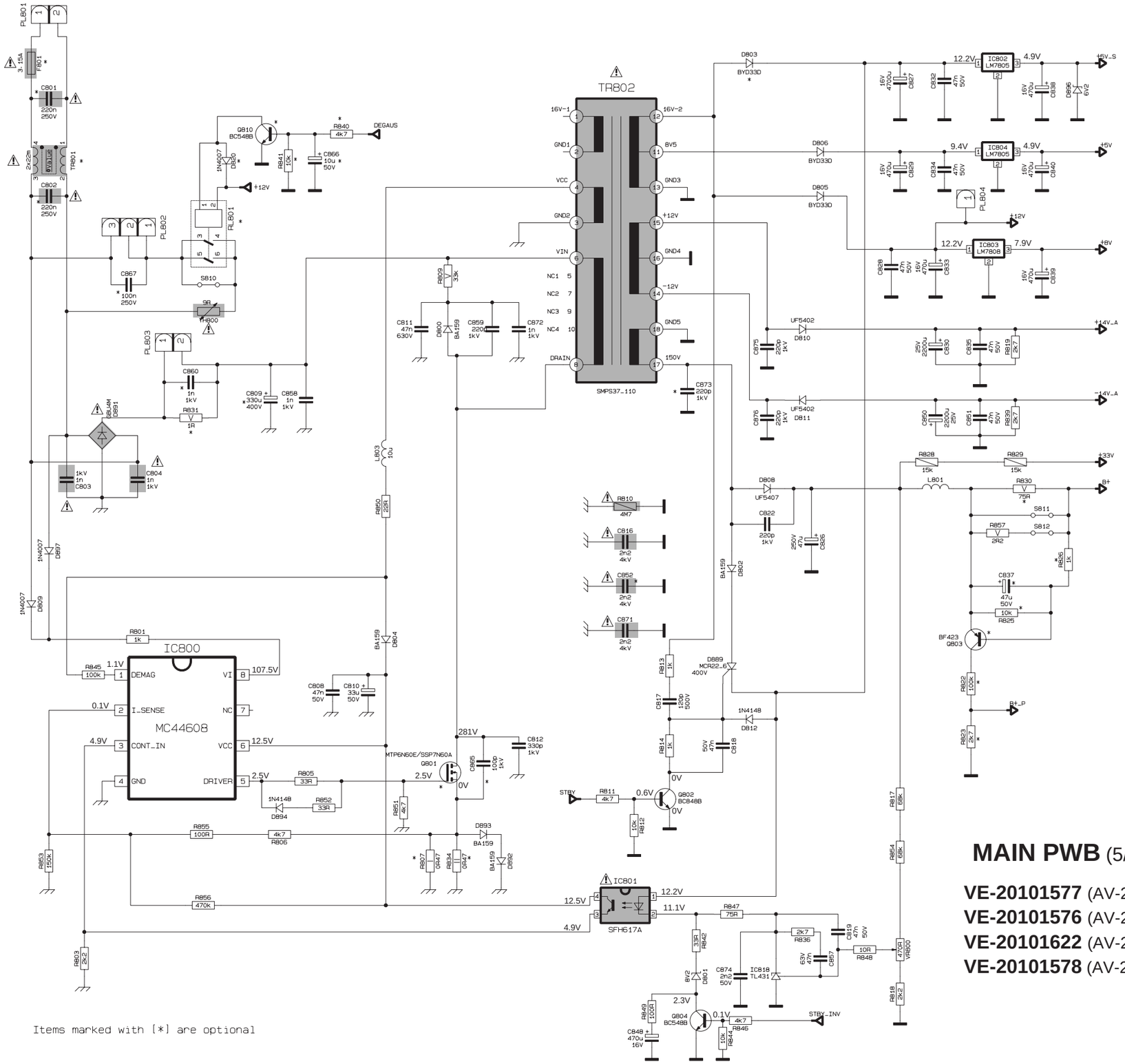
VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)



Items marked with [*] are optional

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

MAIN PWB CIRCUIT DIAGRAM [5/6]

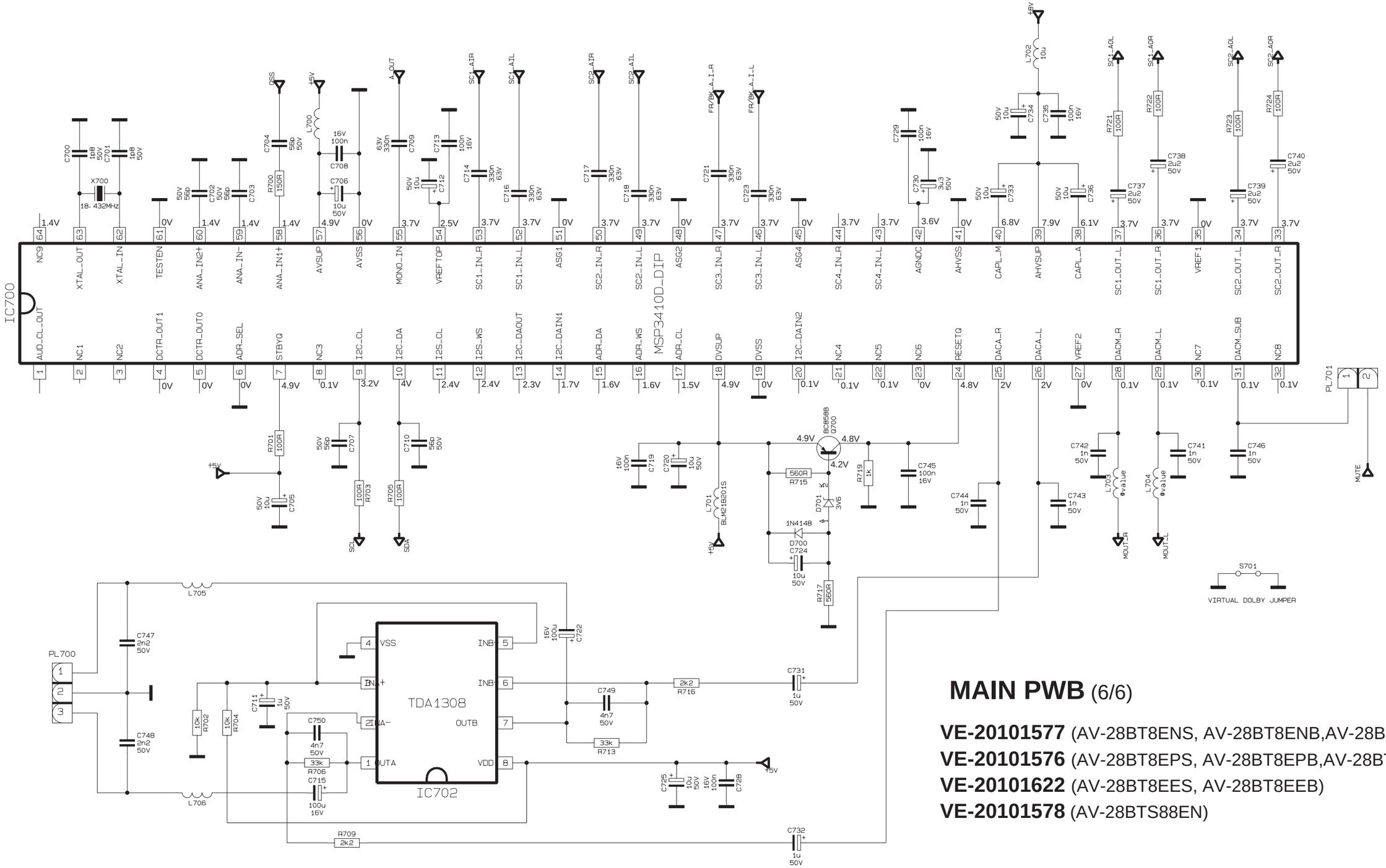


MAIN PWB (5/6)

VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

MAIN PWB CIRCUIT DIAGRAM [6/6]

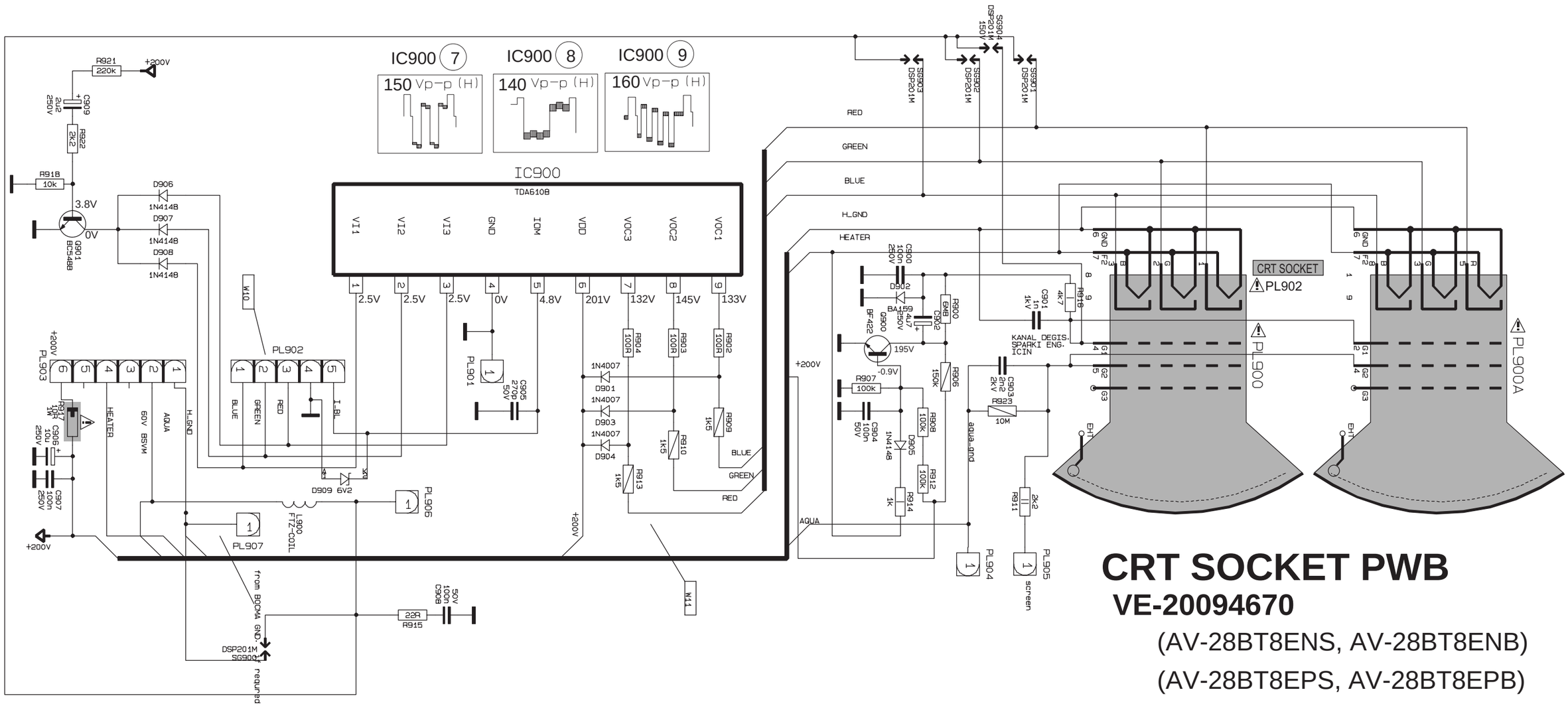


MAIN PWB (6/6)

VE-20101577 (AV-28BT8ENS, AV-28BT8ENB,AV-28BT80EN)
VE-20101576 (AV-28BT8EPS, AV-28BT8EPB,AV-28BT80EP)
VE-20101622 (AV-28BT8EES, AV-28BT8EEB)
VE-20101578 (AV-28BTS88EN)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

CRT SOCKET PWB CIRCUIT DIAGRAM



CRT SOCKET PWB

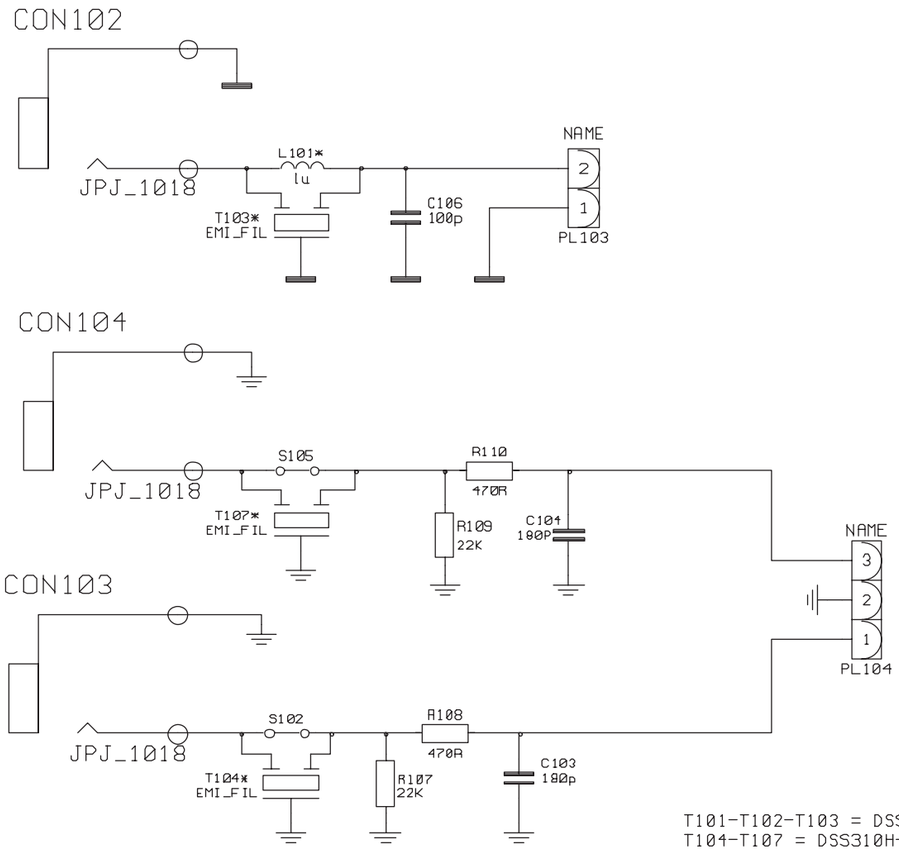
VE-20094670

(AV-28BT8ENS, AV-28BT8ENB)

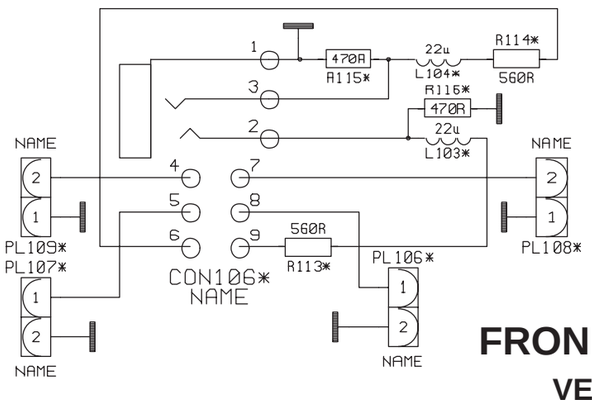
(AV-28BT8EPS, AV-28BT8EPB)

(AV-28BT8EES, AV-28BT8EEB)

FRONT AV & HEADPHONE PWB CIRCUIT DIAGRAM



T101-T102-T103 = DSS310H-55B271M250
T104-T107 = DSS310H-55B222M250



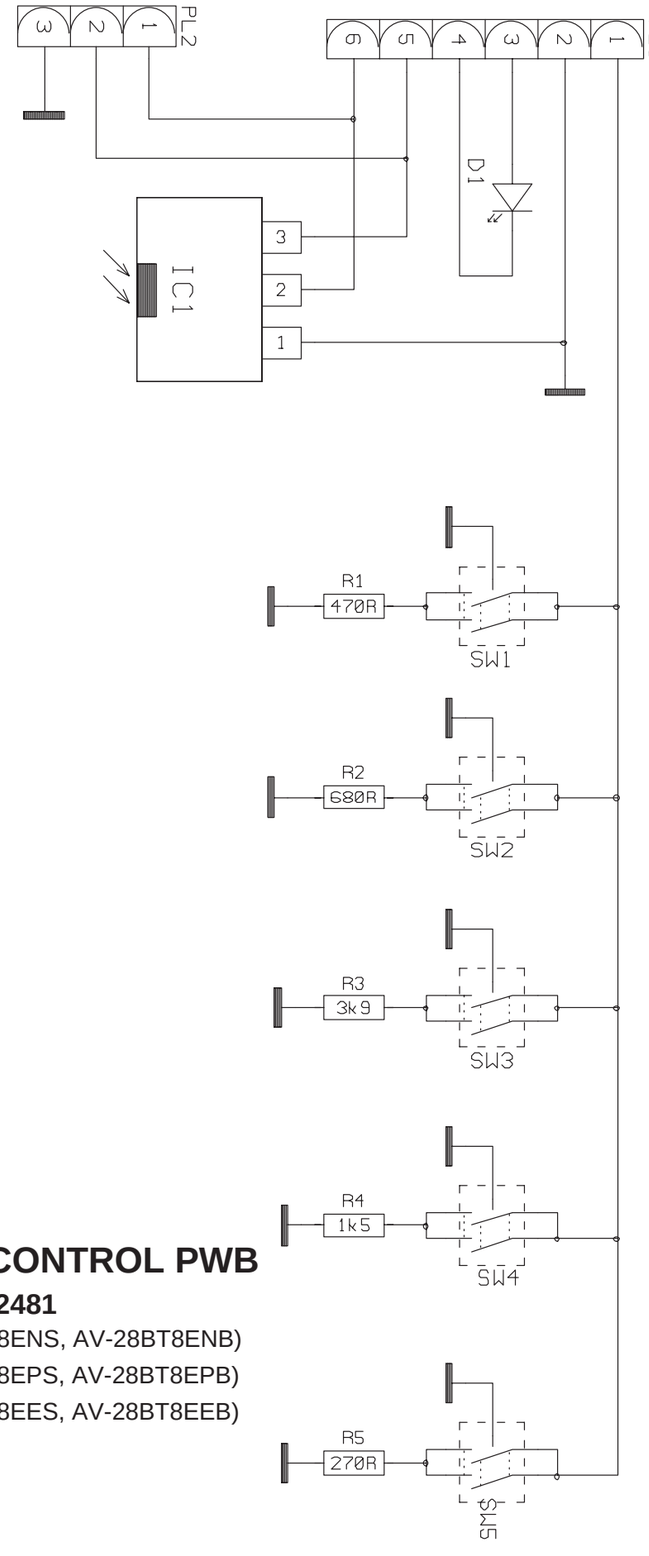
FRONR AV & HEADPHONE PWB

VE-20083646

(AV-28BT8ENS, AV-28BT8ENB)
(AV-28BT8EPS, AV-28BT8EPB)
(AV-28BT8EES, AV-28BT8EEB)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

FRONT CONTROL PWB CIRCUIT DIAGRAM



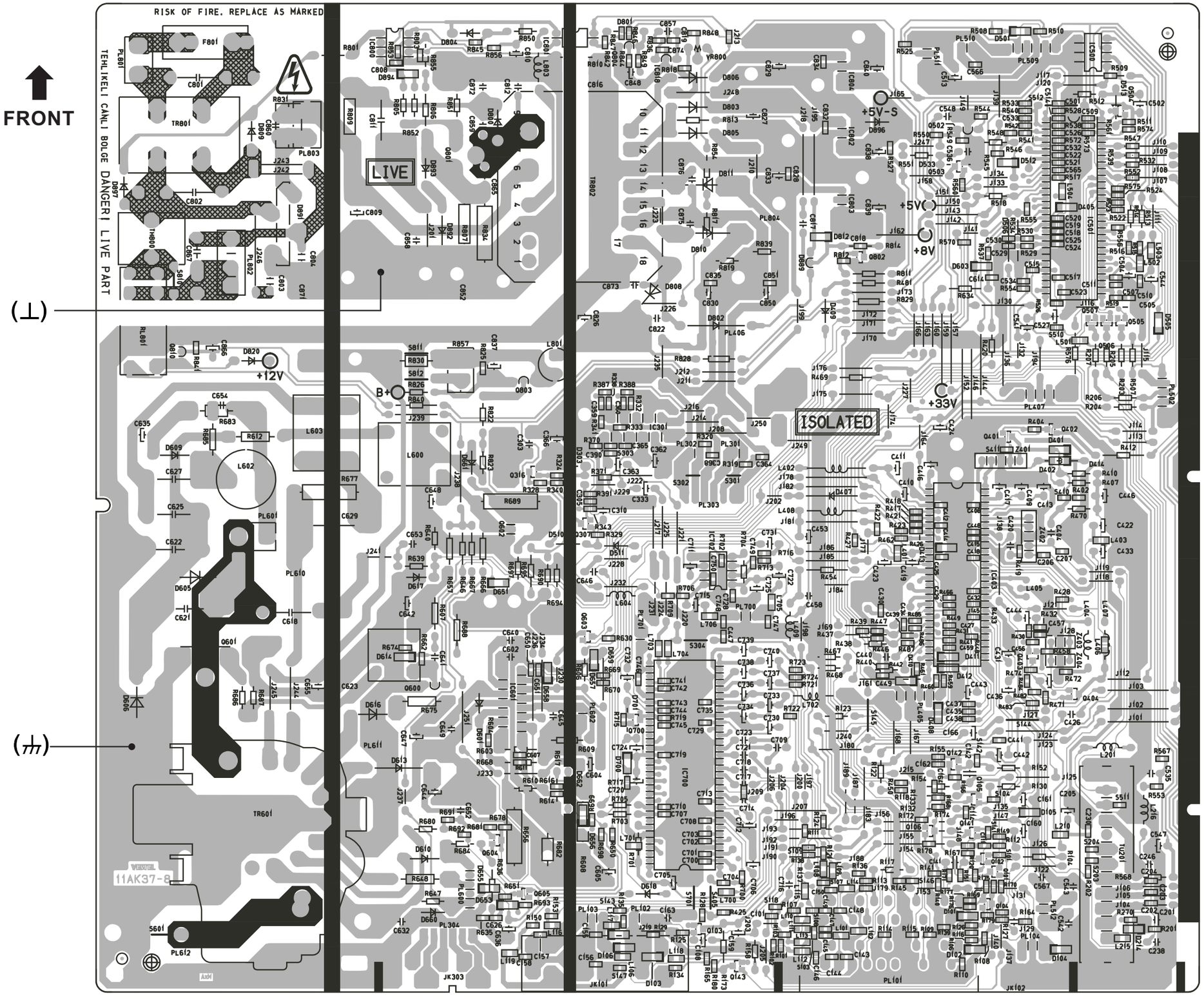
FRONT CONTROL PWB

VE-20082481

(AV-28BT8ENS, AV-28BT8ENB)
(AV-28BT8EPS, AV-28BT8EPB)
(AV-28BT8EES, AV-28BT8EEB)

AV-28BT8ENS / AV-28BT8ENB / AV-28BT80EN
AV-28BT8EPS / AV-28BT8EPB / AV-28BT80EP
AV-28BT8EES / AV-28BT8EEB / AV-28BS88EN

PATTERN DIAGRAMS *MAIN PWB PATTERN*



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